METHODOLOGY FOR EVALUATION OF CROSSCUTTING THEMES IN THE CZECH DEVELOPMENT COOPERATION

ENVIRONMENTAL SUSTAINABILITY INDICATORS

FICHES

INESAN INSTITUTE FOR EVALUATIONS AND SOCIAL ANALYSES

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1. ENVIRONMENTAL SUSTAINABILITY OUTPUT INDICATORS

EEO1: Measures put in place to ensure protection (or restoration) of populations of threatened species

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO1: Measures put in place to ensure protection (or restoration) of populations of threatened species***
Indicator level	Output
Purpose of indicator	Threatened species are often "indicator species" whose presence usually provides vital information about the whole ecosystem´s state. These species cannot be protected as independent units but the whole biotope/ecosystem/type or section of the landscape must be considered. The measures must be holistic and usually include various kinds and scales of the nature conservation practices, including educational and economical background. In general, protection of existing population of a threatened species is much less difficult than restoration, which - if it should be successful – needs orderly more intensive effort.
What the indicator measures	The indicator looks at the measures put in place in order to ensure protection of threatened species during the period of project.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Action Plans Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Threatened species** are any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The International Union for Conservation of Nature (IUCN) treats threatened species not as a single category, but as a group of three categories, depending on the degree to which they are threatened: vulnerable species, endangered species, critically endangered species. **Indicator species** is any biological species that defines a trait or characteristic of the environment.
Further resources	Breckheimer et all. (2014). Defining and evaluating the umbrella species concept for conserving and restoring landscape connectivity. Conservation biology, 28(6), 1584-1593. Roberg, J.M. & Angelstramu, P. (2004). Usefulness of the Umbrella Species Concept as a Conservation Tool. (link)

EEO2: Percentage of land accorded various degrees of protection with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO2: Percentage of land accorded various degrees of protection with project support***
Indicator level	Output
Purpose of indicator	Landscape worldwide consists of a very high number of distinct types, which could vary from very general ones (e.g. forest, seashore) to very fine (e.g. biotopes, communities). Each type has its own level of resilience/resistance to disturbances, which, if exceeded, could lead to its destruction or in cases of a broader, more systematic and large-scale incorrect approach, to landscape depletion and destruction. Therefore, various levels of land protection were introduced to support the correct land use and to avoid systematic damage. However, this is a very rough lead, and more specific indicators should follow when evaluating particular cases/projects.
What the indicator measures	Percentage of land accorded any degree of protection with a financial or other support of the intervention.
Data sources	Project records and documentation Institutional records National and regional statistics/legislation Global statistics (e.g. The Protected Areas Database, OECD database) Stakeholders
Methods of data collection	Desk research Interviews Focus groups Observation
Definition of key terms	**Land protection** is typically undertaken as a preventative measure that reduces the risk of adverse environmental impacts in the future, such as through increased sediment or nutrient loadings that may result from changing land uses.
Further resources	Latawiec, A., & Agol, D. (2015). *Sustainability Indicators in Practice*. Walter de Gruyter GmbH & Co KG. (link).

EEO3: Land converted to other uses with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO3: Land converted to other uses with project support***
Indicator level	Output
Purpose of indicator	Land is a finite resource and land use has a number of important drivers. The increasing demand for food, feed and bio energy have to be combined with the demand for infrastructure, settlements and the designation of land for nature protection, and various water soil and civil protection objectives. The use of agricultural land for other purposes is related to changes in the environment to cater for and facilitate human activity. It is generally a phenomenon linked to economic growth. There are many land development activities resulting in land use change from agricultural land to artificial surfaces: urban sprawl (housing and industrial developments), transport infrastructure (motorways, railways, etc.), tourism and recreation facilities. Increased land development activities often result in higher land prices and more restricted access to land. The way we use our land can have major impacts on environmental conditions.
What the indicator measures	Percentage or absolute value (ha) of land that has been changed to artificial surfaces compared to a reference period.
Data sources	Project records and documentation Institutional records National and regional statistics/legislation Global statistics (e.g. The Protected Areas Database, OECD database) Stakeholders
Methods of data collection	Desk research Interviews Focus groups Observation
Definition of key terms	**Land use change** is defined as the exits from agricultural land use broken down by non – agricultural sectors. It represents the conversion of agricultural land to non-agricultural use.
Further resources	Kalnay, E., & Cai, M. (2003). Impact of urbanization and land-use change on climate. Nature, 423(6939), 528. (link) Veldkamp, A., & Verburg, P. H. (2004). Modelling land use change and environmental impact. Journal of Environmental Management, 72(1), 1-3.

EEO4: Polluted soil rehabilitated with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO4: Polluted soil rehabilitated with project support***
Indicator level	Output
Purpose of indicator	Polluted soil is usually a great topic during industrial landscape conversions, urban planning or during remediation of former brownfields. Soil contamination represents great health and environmental risk and its rehabilitation is usually economically and technically highly exacting. Level of contamination depends on a kind and concentration of the polluting substance and the area/amount of soil polluted. Proving the successful rehabilitation is a demanding, long-scale process, too, but once confirmed proves mastering one of the most difficult landscape-conservation practices.
What the indicator measures	The indicator measures how much polluted soil was rehabilitated with the project financial or other support. The indicator is expressed in the absolute term (ha or m3) or in percentage of polluted soil rehabilitated compared to non-rehabilitated.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews
Definition of key terms	**Soil rehabilitation/remediation** is a way of purifying and revitalizing the soil (e.g. soil washing, bioremediation, thermal desorption). It is the process of removing contaminants in order to protect both the health of the population and the environment. In short, the goal of the process is to restore the soil to its natural, pollution-free state. **Soil contamination/pollution** as part of land degradation is caused by the presence of human-made chemicals or other alteration in the natural soil environment. It is typically caused by industrial activity, agricultural chemicals, or improper disposal of waste.
Further resources	Boulding, J. R. & Ginn, J. S. (2003). Practical handbook of soil, vadose zone, and ground-water contamination: assessment, prevention, and remediation. CRC Press. (link)

EEO5: Soil polluted by activities associated with the project

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO5: Soil polluted by activities associated with the project***
Indicator level	Output
Purpose of indicator	Soil contamination represents great health and environmental risk and its rehabilitation is usually economically and technically highly demanding. Having said that, any amount of soil polluted by activities of any project is a bad result on its own. However, a large scale of the types of soil pollution exists, ranking from light contamination by biodegradable substances to the heavy ones, caused e.g. by dioxins or heavy metals. These different contamination types should be taken into account when estimating scale of the damage caused by the project, together with a probability of the potential successful rehabilitation.
What the indicator measures	The indicator measures how much soil was polluted with the project financial or other support. The indicator is expressed in the absolute term (ha, m3) or in percentage of soil polluted compared to the situation prior the intervention.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews
Definition of key terms	**Soil contamination/pollution** as part of land degradation is caused by the presence of human-made chemicals or other alteration in the natural soil environment. It is typically caused by industrial activity, agricultural chemicals, or improper disposal of waste.
Further resources	Boulding, J. R., & Ginn, J. S. (2003). Practical handbook of soil, vadose zone, and ground-water contamination: assessment, prevention, and remediation. CRC Press. (link)

EEO6: Number and type of tools developed with project support to ensure efficient use of forest and land resources and stem deforestation

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO6: Number and type of tools developed with project support to ensure efficient use of forest, land resources and stem deforestation***
Indicator level	Output
Purpose of indicator	Controlling of the type, structure and intensity of the land-use is one of the major assumptions of managing, enhancing and preserving landscape diversity. In recent years, many very efficient and fine-definition tools such as remote sensing or photo monitoring were developed to measure the land-use at almost a global scale. In a case of particular projects, a selection of such tools must be used in order to evaluate indicators distinct to the project goals. Data, supporting such evaluation, could be presented via Geographical Information Systems (GIS) and should show the major shift in selected factors due to the project influence.
What the indicator measures	The indicator measures the number and type of tools which were developed with a project financial or other support to ensure efficient use of land and forest.
Data sources	Project and other relevant institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Deforestation** is the permanent destruction of forests in order to make the land available for other uses. The most common reasons are: housing, urbanization, commercial items, fuel, oil, room for cattle ranching, etc. **GIS (geographic information system)** is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.
Further resources	Morrison-Métois, S.,& Lundgren, H. Forests and sustainable forest management. Evaluation evidence in addressing deforestation to reduce CO2 emissions. OECD DAC Network on Development Evaluation Secretariat. (link)

EEO7: Number and type of trees planted

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO7: Number and type of trees planted***
Indicator level	Output
Purpose of indicator	Tree diversity in any landscape can be roughly subdivided in three major topics: diversity in the urban areas, (sub) urban landscapes and forests. All of them store some amount of carbon, but the sequestration capacity depends not only on the number of species, but also on other ecological factors like altitude, site productivity, microclimate and many more. Therefore the number and type of trees planted is only additional indicator of the sequestration capacity, which needs to be put together with more detailed and complex data. However, when planting any new forests, local species and high diversity should be considered to ensure that, although the sequestration capacity is not the maximal one, the biotope itself is well-adapted to the local conditions and its longevity is guaranteed, so the carbon sequestration is not abrupt by most of the environmental events and should run uninterrupted at a larger time scale.
What the indicator measures	The indicator measures the number and type of trees planted with project financial or other support.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Interviews Observation Desk research
Definition of key terms	**Carbon sequestration** is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide. Carbon sequestration involves long-term storage of carbon dioxide or other forms of carbon to mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. In New Vistas in Agroforestry (pp. 5-17). Springer Netherlands. (link). Post, W. M., & Kwon, K. C. (2000). Soil carbon sequestration and land-use change: processes and potential. Global change biology, 6(3), 317-327.

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EEO8: Land afforested and its carbon sequestration capacity

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO8: Land afforested and its carbon sequestration capacity***
Indicator level	Output
Purpose of indicator	The land sequestration capacity depends not only on the scale of the afforestation, but also on other ecological factors like altitude, site productivity, microclimate and many more. Complexity, longevity and resilience of the biotopes created by afforestation also plays a major role, and in some cases the increase of sequestration could be outweighed by ecological damages caused by the afforestation (e.g. in the case of Central European rich-species grasslands and many more). Hence, more factors should be considered when measuring the benefits of the carbon sequestration than the pure number of carbon fixed per unit of the biomass.
What the indicator measures	The indicator measures the amount of afforested land in absolute terms (ha or m3) with a project financial or other support. Its carbon sequestration capacity will be difficult to measure because it relates on many factors and varies annually, thus measure only when possible and/or when data are available.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Focus group discussion
Definition of key terms	**Carbon sequestration** is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide. Carbon sequestration involves long-term storage of carbon dioxide or other forms of carbon to mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels. **Afforestation** is the establishment of a forest or stand of trees in an area where there was no previous tree cover.
Further resources	Jandl, R. et al. (2007). How strongly can forest management influence soil carbon sequestration? Geoderma, 137(3), 253-268. Post, W. M., & Kwon, K. C. (2000). Soil carbon sequestration and land-use change: processes and potential. Global change biology, 6(3), 317-327. Qin, Z., Dunn, J. B., Kwon, H., Mueller, S., & Wander, M. M. (2016). Soil carbon sequestration and land use change associated with biofuel production: empirical evidence. (link)

EEO9: Area of rehabilitated or protected forests

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO9: Area of rehabilitated or protected forests***
Indicator level	Output
Purpose of indicator	Almost any forest in the world is changed by human influence and biomass of the major portion of the forest worldwide is being harvested at some scale for the human use. That amplifies the importance of rehabilitated or protected forests. These forests differ in the level of the protection: in the lighter conservation regime, only the general forest survival is the objective and the economical use is allowed at some sustainable level; in the most strict forest reservations any direct human influence is eliminated. Hence, not only the rough ratio of the forest reservation, but also the different levels of the forest conservation within them and their biological value should be considered during the evaluation.
What the indicator measures	Percentage or absolute value (ha) of the total area of rehabilitated or protected forests which was supported by project financial or other support.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Forest protection** is the preservation or improvement of a forest threatened or affected by natural or man - made causes (urbanization, unsustainable farming and logging, pollution of soil etc.)
Further resources	FAO. (n.d.). *Part I – The New Generation of Forestry Projects: Their Role in Sustainable Development*. (link) Morrison-Métois, S.,& Lundgren, H. Forests and sustainable forest management. Evaluation evidence in addressing deforestation to reduce CO2 emissions. OECD DAC Network on Development Evaluation Secretariat. (link)

EEO10: Quantity and origin of wood used in project activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO10: Quantity and origin of wood used in project activities***
Indicator level	Output
Purpose of indicator	In recent years, there has been growing recognition that many of the actions taken in order to generate development in the immediate future fail to sustain the momentum of growth in the longer term. There are negative environmental effects of tree harvesting and logging operations on forest biodiversity, soil erosion, soil compaction and hydrological cycle. In addition, wood processing, wood utilization and waste management in forest industries generate environmental pollution. Sustainable development implies restricting the harvesting of wood and other physical products of the forest to levels that can be maintained through sound forest management. Yet, the demand for wood products has been increasing
What the indicator measures	The indicator measures the amount of wood (in m3) used in project activities and its origin.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Focus group discussion
Definition of key terms	**Sustainable development** is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. In New Vistas in Agroforestry (pp. 5-17). Springer Netherlands. (link). FAO. (n.d.). *Part I – The New Generation of Forestry Projects: Their Role in Sustainable Development*. (link) Fuwape, J. A. (n.d.). *The Impacts of Forest Industries and Wood Utilization on the Environment.* (link) International Institute for Sustainable Development. (n.d.). *Sustainable Development.* (link)

EEO11: Area of land converted to forests.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO11: Area of land converted to forests.***
Indicator level	Output
Purpose of indicator	The positive effect of the afforestation largely depends on distinct natural history and biological value of the afforested area. In many cases, intensive afforestation could cause large ecological damages or can help unify the landscape structure, which might lead to decrease in biological diversity and increase ecological instability (this mainly happens in temperate zone). On the other hand, some rapidly deforested areas could be restored via afforestation, although it may take a very long period to reach the same level of biological diversity as before the deforestation and, in some cases, the original diversity could be lost forever (case of rapid deforestation of the tropical rain forests).
What the indicator measures	Percentage or absolute value (ha) of the total area of land converted to forests which were supported by project financial or other support.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Afforestation** is the establishment of a forest or stand of trees in an area where there was no previous tree cover. **Deforestation** is the permanent destruction of forests in order to make the land available for other uses. The most common reasons are: housing, urbanization, commercial items, fuel, oil, room for cattle ranching, etc.
Further resources	FAO. (n.d.). *Part I – The New Generation of Forestry Projects: Their Role in Sustainable Development*. (link). Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. In New Vistas in Agroforestry (pp. 5-17). Springer Netherlands. (link).

EEO12: Number of occasions when local knowledge about forests and land management has been sought and integrated into the project.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO12: Number of occasions when local knowledge about forests and land management has been sought and integrated into the project.***
Indicator level	Output
Purpose of indicator	The local knowledge might provide important information not only about the current way of land and forest treatment, but might also provide clues about its past and may help to estimate intensity, pattern and range of the human impact. Frequently, local doesn´t automatically mean sustainable: it could be also knowledge of exploitation, and can serve as an example of bad practice (mostly in the tropical subtropical belt). Usually, good practices of this type worth of including in any project should be obtained from locals inhabiting certain area for more than one century.
What the indicator measures	The number occasions or events when local knowledge about forests and land management has been sought and integrated into the project
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Focus group discussions Survey
Definition of key terms	**Local knowledge** is the knowledge that people in a given community has developed over time, and continues to develop. It is based on experience, often tested over centuries of use, adapted to local culture and environment, embedded in community practices, held by individuals or communities, dynamic and changing. **Land management** is the process of managing the use and development (in both urban and rural settings) of land resources. Land resources are used for a variety of purposes which may include organic agriculture, reforestation, water resource management and eco-tourism projects. Land management can have positive or negative effects on the terrestrial ecosystems. Land being over- or misused can degrade and reduce productivity and disrupt natural equilibriums.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. In New Vistas in Agroforestry (pp. 5-17). Springer Netherlands. (link) Molnar, Z. (2016). Indigenous and Local Knowledge of Biodiversity and Ecosystem Services in Europe and Central Asia. (link)

EEO13: Project used local resources and technologies

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EEO13: Project used local resources and technologies***
Indicator level	Output
Purpose of indicator	Use of local resources almost always means to spare energy, money and, in certain cases, also helping the development of the local community. Occasionally, there is a thin border between "use" and "exploit", hence the additive indicators such as sustainability and social sensitivity should be accompanied. Additively, the resources used shouldn´t be scarce, protected or of a high natural/cultural value. A high effort should be put to use renewable, environmentally friendly sustainable local resources and technologies.
What the indicator measures	The indicator measures whether any local resources and technologies have been integrated into the project activities in any phase of the project.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Desk research Interviews Focus group discussions Survey
Definition of key terms	**Local knowledge** is the knowledge that people in a given community has developed over time, and continues to develop. It is based on experience, often tested over centuries of use, adapted to local culture and environment, embedded in community practices, held by individuals or communities, dynamic and changing.
Further resources	Menzies, C. R. (Ed.). (2006). Traditional ecological knowledge and natural resource management. U of Nebraska Press. (link)

EEO20: Project has used the least polluting means of transportation

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EEO20: Project has used the least polluting means of transportation***
Indicator level	Output
Purpose of indicator	Traffic is one of the biggest producers of greenhouse gases, noise, dust and various other substances, which can worse health and well-being of the inhabitants in affected area. It is not only the traffic itself, but also the energy and material needed to preserve traffic infrastructure, which makes it one of the largest and most intensive environmental threats worldwide. However, certain measures can be applied to reduce it – some types of transport are environmentally friendlier than others (e. g. bicycles than trains, trains than cars, cars than planes), but this could vary locally, depending on current state of the infrastructure.
What the indicator measures	The indicator checks whether the least polluting means of transportation were used during the implementation phase of the project. It is complicated to judge this indicator because it depends and varies on the context, however, common sense should be applied.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Air pollution** occurs when harmful substances including particulates and biological molecules are introduced into Earth's atmosphere. It may cause diseases, allergies or death of humans; it may also cause harm to other living organisms such as animals and food crops, and may damage the natural or built environment.
Further resources	Emissions by different mode of transport (link)

EEO21: Number/percentage of old vehicles replaced for less polluting units

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EEO21: Number/percentage of old vehicles replaced for less polluting units***
Indicator level	Output
Purpose of indicator	Air pollutions caused by traffic cover a great portion of the pollutions worldwide. Their effect is direct and indirect, causing local environmental damages and also the rise of greenhouse gases globally. Technological advance reduces the amount of the pollutants released into the atmosphere by installing more efficient exhaust filters, developing more efficient engines, hybrid cars or even electric units. Thus, the replacement of old technologies is generally good; but, some more complex measures should be taken into account like the environmental impact of the factory, carbon track of the manufacturing of the batteries, the environmental impact of the technology traffic cost etc.
What the indicator measures	The indicator measures the number or percentage (compared to situation prior the intervention) of old vehicles which were replaced for less polluting units with the financial or other support of the project.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Air pollution** occurs when harmful substances including particulates and biological molecules are introduced into Earth's atmosphere. It may cause diseases, allergies or death of humans; it may also cause harm to other living organisms such as animals and food crops, and may damage the natural or built environment.
Further resources	Feng, Y., Fullerton, D., & Gan, L. (2005). Vehicle choices, miles driven, and pollution policies (No. w11553). National Bureau of Economic Research. (link)

EEO22: Number and type of carbon sequestration technologies installed

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EEO22: Number and type of carbon sequestration technologies installed***
Indicator level	Output
Purpose of indicator	Carbon dioxide (CO2) capture and storage (CCS) consists of separating CO2 from emission sources, compressing it, transporting it to a storage location, and ensuring its long-term isolation from the atmosphere, usually through injection into a geological storage area deep underground. Because no single technology option can provide all of the reductions needed to accomplish CO2 emission stabilization, CCS is one option among a number of mitigation actions, including increased energy efficiency and greater use of nuclear and renewable energy.
What the indicator measures	The indicator measures the number and type of carbon sequestration technologies installed with project financial or other support
Data sources	Project and institutional records and documentation (including contracts, invoices etc.) Municipal governments Stakeholders
Methods of data collection	Interviews Observation Desk research
Definition of key terms	**Carbon sequestration (CCS)** is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide. Carbon sequestration involves long-term storage of carbon dioxide or other forms of carbon to mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.
Further resources	IEA (2013), Technology Roadmap Carbon Capture and Storage, OECD/IEA, Paris. (link) IEA. (2012). A policy strategy for carbon capture and storage. (link)

EEO23: Number and type of measures adopted to support green growth

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EEO23: Number and type of measures adopted to support green growth***
Indicator level	Output
Purpose of indicator	The green growth might be attained by many means, including reduction of air pollutants, use of the renewable resources, sustainable waste management and environmentally friendly economy and politics. However, when evaluating such a complex issue, the local conditions must be taken into account and the measures must be weighed by the extent of their influence. Many "green-looking" technologies and methods seem perfectly green without the trade-offs they feature (e.g. carbon sequestration via fast-growing crops x landscape diversity, or nuclear energy x long-term radioactive waste storage). The measures can help the public to better understand how it can contribute and support the transition to a green economy.
What the indicator measures	Number and type of measures which evaluate social or economic or environmental performance which were adopted with the project support in order to sustain green growth.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Green Growth** means fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.
Further resources	Platform, G. G. K. (2013). Moving towards a common approach on green growth indicators. A Green Growth Knowledge Platform Scoping Paper, 46. (link).

EEO30: Number of water treatment facilities installed or upgraded

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO30: Number of water treatment facilities installed or upgraded***
Indicator level	Output
Purpose of indicator	This indicator tracks the number of water treatment facilities which were installed or upgraded with the objective to improve quality of water. Polluted water (chemical or biological) has negative effects on human health, on the costs and on aquatic ecosystem. Water treatment facilities are technologies which remove contaminants and undesirable components, or reduce their concentration so that the water becomes fit for its desired end-use. The installation of these facilities is essential for avoiding waterborne illnesses which kill a large number of people each year, and stop endangering and changing ecosystems. Project support may be financial or skill based.
What the indicator measures	Indicator measures the number of water treatment facilities which were installed, repaired or upgraded with the project financial or other support
Data sources	Project and institutions' records Stakeholders
Methods of data collection	Desk research Interviews
Definition of key terms	**Water treatment** is any process that makes water more acceptable for a specific end-use. The end use may be drinking, industrial water supply, irrigation, river flow maintenance, water recreation, etc., including being safely returned to the environment. Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use. Treatment methods such as chlorination, filtration and distillation ensure that waterborne bacteria and parasites don't cause outbreaks of disease.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link) World Health Organization. (2004). Guidelines for drinking-water quality (Vol. 1). World Health Organization (link)

EEO31: Number and type of sources of safe drinking water provided

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO31: Number and type of sources of safe drinking water provided***
Indicator level	Output
Purpose of indicator	This indicator tracks the number and type of safe drinking water sources which were provided with a support by a project. An access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Water is essential to sustain life, and a satisfactory (adequate, safe and accessible) supply must be available to all. In some regions, it has been shown that investments in water supply and sanitation can yield also a net economic benefit, since the reductions in adverse health effects and health care costs outweigh the costs of undertaking the interventions.
What the indicator measures	Indicator measures the number and types of sources of safe drinking water provided by financial or other support from project. While the primary measurement outcome is a number, the type of sources of safe drinking water should also be considered in the evaluation.
Data sources	Project and institutions' records Stakeholders
Methods of data collection	Survey Interviews Desk research Focus groups Observation
Definition of key terms	**Safe drinking water.** Water which does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Safe drinking-water is suitable for all usual domestic purposes, including personal hygiene. **Sources of drinking water**. 1, piped water on premise or 2, other improved drinking water sources: public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link) WHO. (2004). Guidelines for drinking-water quality (Vol. 1). (link)

EEO32: Incidences of water pollution associated with the project

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO32: Incidences of water pollution associated with the project***
Indicator level	Output
Purpose of indicator	The main water pollution (eutrophication, acidification, toxic contamination) concerns relate to the impacts on human health, on the cost of drinking water treatment and on aquatic ecosystems. The indicator assembles the number of both surface and ground water pollution incidences directly or indirectly associated with the project which have occurred during the project implementation, and by the time of evaluation.
What the indicator measures	The indicator measures the number of incidences/cases of any type of pollution which could be directly/indirectly related the project
Data sources	Key stakeholders including beneficiaries Media
Methods of data collection	Survey Interviews Desk research Focus groups Observation
Definition of key terms	**Water pollution**. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). This form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds.
Further resources	Directorate, O. E. (2008). OECD Key Environmental Indicators (link).

EEO33: Number of measures aimed at protecting and restoring bodies of surface and ground water implemented

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO33: Number of measures aimed at protecting and restoring bodies of surface and ground water implemented***
Indicator level	Output
Purpose of indicator	Despite significant progress in reducing pollution loads from municipal and industrial point sources through installation of appropriate waste water treatment plants, improvements in freshwater quality are not always easy to discern. The main challenge is to protect and restore all bodies of surface and ground water to ensure the achievement of water quality objectives. This implies further reducing pollution discharges, through appropriate treatment of waste water and a more systematic integration of water quality considerations in agricultural and other sectoral policies. It also implies an integrated management of water resources based on the ecosystem approach.
What the indicator measures	Indicator focuses on the number of measures put in place to protect and restore bodies of surface and ground water with the support of the project
Data sources	Project and institutional records and documentation Municipal governments Stakeholders
Methods of data collection	Survey Interviews Desk research
Definition of key terms	**Fresh water** is naturally occurring water on Earth's surface. Natural sources of water are of three main types: rainwater (collected from roof run-off and ground surfaces); surface water (streams, rivers, lakes, impoundments and reservoirs); and groundwater.
Further resources	Goel, P. K. (2006). Water pollution: causes, effects and control. New Age International. (link)

EEO34: Volume of polluted freshwater cleaned

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO34: Volume of polluted freshwater cleaned***
Indicator level	Output
Purpose of indicator	Fresh water is an important natural resource necessary for the survival of all ecosystems. In case of humans, freshwater is very often a source of drinking water, especially in developing countries. Fresh water is not necessary safe to drink and require cleansing from pathogens or chemicals. To be considered safe, drinking water must be free from pathogens and elevated levels of harmful substances at all times.
What the indicator measures	Indicator measures the amount of contaminated water which was cleaned over the implementation of the project. It is possible to express indicator either in absolute terms or the percentage which is compared to baseline (situation prior the intervention).
Data sources	Project and institutional records Stakeholders
Methods of data collection	Interviews Desk research
Definition of key terms	**Fresh water** is naturally occurring water on Earth's surface. Natural sources of water are of three main types: rainwater (collected from roof run-off and ground surfaces); surface water (streams, rivers, lakes, impoundments and reservoirs); and groundwater.
Further resources	Goel, P. K. (2006). Water pollution: causes, effects and control. New Age International. (link)

EEO35: Number and type of freshwater sources (ground & surface) cleaned

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO35: Number and type of freshwater sources (ground & surface) cleaned***
Indicator level	Output
Purpose of indicator	Water is essential for human survival and well-being and important to many sectors of the economy. However, resources are irregularly distributed in space and time, and they are under pressure due to human activity - namely urbanisation, population growth, increased living standards, growing competition for water, industrialization of developing countries and pollution. Polluted water has negative effects on human health, on the costs and on aquatic ecosystem This indicator tracks the number and type of existing water resources which were cleaned with the support of the project.
What the indicator measures	The indicator measures the number and type of water resources, both ground and surface, which were cleaned with the support of the intervention.
Data sources	Project and institutional records Stakeholders including target group
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Freshwater resources.** Resources of freshwater which are naturally occurring on Earth's surface in ice sheets, ice caps, glaciers, icebergs, bogs, ponds, lakes, rivers and streams, and as underground and groundwater in aquifers and underground streams.
Further resources	FAO. *Aquastat*. (link)

EEO36: Share/proportion of population connected to waste water treatment plants

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO36: Share of population connected to waste water treatment plants***
Indicator level	Output
Purpose of indicator	Wastewater from households and different industries represent a significant pressure on the environment and treatment is normally required before discharge. Discharge of untreated domestic wastewater is a predominant source of pollution of aquatic treat wastewater. This indicator assesses the proportion of population connected to waste water treatment plant. It helps to identify households and communities where wastewater treatment action is required to protect the ecosystem.
What the indicator measures	This indicator presents sewage treatment connection rates, i.e. the percentage of the population connected to a wastewater treatment plant. "Connected" means actually connected to a wastewater treatment plant through a public sewage network. It does not take into account independent private facilities.
Data sources	Project, institutional and statistical records Stakeholders
Methods of data collection	Survey Interviews Desk research
Definition of key terms	**Wastewater treatment** Wastewater treatment is a process used to convert wastewater - which is water no longer needed or suitable for its most recent use - into an effluent that can be either returned to the water cycle with minimal environmental issues or reused. **Wastewater treatment plants** may be distinguished by the type of wastewater to be treated, i.e. whether it is sewage (mainly for households), industrial wastewater, agricultural wastewater or leachate.
Further resources	FAO. Aquastat. (link) Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link)

EEO37: Number of people with access to clean/safe drinking water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO37: Number of people with access to clean/safe drinking water***
Indicator level	Output
Purpose of indicator	The purpose of the indicator is to measure the number of people with access to safe drinking water sources gained due to a project realization and implementation. An access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. Improving access to safe drinking-water can result in tangible benefits to health and quality of life in general.
What the indicator measures	Indicator measures the number of people who benefited from a project by gaining access to safe drinking water sources.
Data sources	Project records Implementing partners Beneficiaries
Methods of data collection	Survey Interviews Desk research
Definition of key terms	**Safe drinking water.** Water which does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Safe drinking-water is suitable for all usual domestic purposes, including personal hygiene. **Sources of drinking water**. 1. piped water on premise or 2. other improved drinking water sources: public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link) WHO. (2004). Guidelines for drinking-water quality (Vol. 1). (link)

EEO38: Number and type of actions aimed at efficient use of water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO38: Number and type of actions aimed at efficient use of water***
Indicator level	Output
Purpose of indicator	Increasing human demand for water coupled with the effects of climate change mean that the future of our water supply is not secure. More attention should be paid to making better use of existing natural resources, controlling demand and reducing losses, and achieving greater efficiencies in water management. The possible way is through solutions for efficient use of water which focus not only on reducing the amount of potable water used, but also on reducing the use of non-potable water where appropriate (i.e. flushing toilet, watering landscape, etc.). This indicator helps to identify the amount and type of actions which were used to ensure efficient water usage.
What the indicator measures	Indicator measures the number and type of actions taken in order to use water efficiently
Data sources	Project records Implementing partners Beneficiaries
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Water efficiency** is an action which results in more efficient water use and thus reduces water demand. Water efficiency differs from water conservation; it focuses on reducing waste, not restricting use. Examples of water efficient steps includes fixing leaking taps, taking showers rather than baths, composting toilets, wastewater reuse, recycling system, installing displacements devices inside toilet cisterns, etc.
Further resources	Vickers, A. (2002). Water Use and Conservation. Amherst, MA Waterplow Press. 434. (link) World Water Assessment Programme (United Nations). (2006). *Water: A shared responsibility* (Vol. 2). Berghahn Books. (link)

EEO39: Number and type of actions aimed at an integrated approach to the management of freshwater resources and/or at water recycling adopted

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO39: Number and type of actions aimed at an integrated approach to the management of freshwater resources and/or at water recycling adopted***
Indicator level	Output
Purpose of indicator	Fresh water as a commodity generates concern being an exhaustible resource and due to the environmental issues related to its degradation. Sustainable management of freshwater resources thus has gained importance at regional and global scales and 'Integrated Water Resources Management' has become the corresponding paradigm. The purpose of this indicator is to follow activities of resource management (including recycle use) and find out whether the project supports sustainable water management.
What the indicator measures	Indicator measures the number and type of activities taken in order to adopt an integrated approach to the management of freshwater resources and/or water recycling.
Data sources	Project records Implementing partners Beneficiaries
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Water resource management** is the activity of planning, developing, distributing and managing the optimum use of water resources. It is a sub-set of water cycle management. Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. **Integrated water resources management** is 'a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems' (Global Water Partnership). **Recycled water** (also called wastewater reuse or water reclamation) is the process of converting wastewater into water that can be reused for other purposes, such as irrigation, replenishing surface water and groundwater water, potable reuse.
Further resources	Boulding, J. R., & Ginn, J. S. (2003). Practical handbook of soil, vadose zone, and ground-water contamination: assessment, prevention, and remediation. CRC Press. (link) Rahaman, M.M. & Varis, O. (2005). Integrated water resources management: evolution, prospects and future challenges. (link)

EEO40: Evidence of measures put in place to ensure efficient use of water in all project-related activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO40: Evidence of measures put in place to ensure efficient use of water in all project-related activities***
Indicator level	Output
Purpose of indicator	Improving water efficiency means increasing water productivity –that is, reducing the intensity of water use for, and pollution from socio economic activities through maximizing the value of the uses of water–, improving the allocation of water among competing water uses so as to obtain greater socio-economic value per drop of water –ensuring environmental flows–, and improving technical efficiency of water services and the management efficiency of their provision over the complete life cycle. Measures put in place to ensure efficient use of water and its impacts should help to reduce water use, provide an overview of the use and/or help to set new mechanisms or policies for further solutions.
What the indicator measures	This indicator should ascertain any kind of evidence of measures put in place in order to ensure efficient use of water in all the phases of the project.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Survey Interviews Desk research Focus groups
Definition of key terms	**Water efficiency** is an action which results in more efficient water use and thus reduces water demand. Water efficiency differs from water conservation; it focuses on reducing waste, not restricting use. Examples of water efficient steps includes fixing leaking taps, taking showers rather than baths, composting toilets, wastewater reuse, recycling system, installing displacements devices inside toilet cisterns, etc.
Further resources	Vickers, A. (2002). Water Use and Conservation. Amherst, MA Waterplow Press. 434. (link) World Water Assessment Programme (United Nations). (2006). *Water: A shared responsibility* (Vol. 2). Berghahn Books. (link)

EEO41: Local knowledge about water management has been integrated into the project

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EEO41: Local knowledge about water management has been integrated into the project***
Indicator level	Output
Purpose of indicator	To manage the scope, complexity and uncertainty of global environmental problems, it is important to take account of different types and sources of knowledge. The knowledge that the locals possess about water management can supplement scientific knowledge in resource planning and management strategies. The communities' knowledge and the experience gained from prolonged exposure to the local environmental dynamics plays greater role in supplementing demand for water services.
What the indicator measures	The indicator measures whether the local knowledge of water management has been integrated into the project activities in any phase of the project.
Data sources	Project records Stakeholders including beneficiaries
Methods of data collection	Desk research Survey Interviews Focus group discussion
Definition of key terms	**Water resource management** is the activity of planning, developing, distributing and managing the optimum use of water resources. It is a sub-set of water cycle management. Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands.
Further resources	Raymond, C. M. et al. (2010). Integrating local and scientific knowledge for environmental management. Journal of environmental management, 91(8), 1766-1777 (link)

EEO50: Evidence of measures put in place to ensure that all subjects involved in a project separate waste

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO50: Evidence of measures put in place to ensure that all subjects involved in a project separate waste***
Indicator level	Output
Purpose of indicator	Separation is a key element for further disposal and treatment of waste. There are two aspects of separation. The first is the degree of mixing of different elements or materials within a product, or the concentration at which the element is present, which can be addressed through design for recyclability. The second is to keep different 'wastes' separate at the point of generation, to ensure that they remain clean and uncontaminated by other waste streams. Separation at source has several benefits: maintains a higher quality of material for recycling, decreases the occupational risks for waste workers, and means that waste can most often be sent straight to the correct place for processing, instead of one facility to be separated and then another to be processed.
What the indicator measures	The indicator looks at the measures put in place in order to ensure that all subjects (at all levels) involve in separation of waste during the project implementation.
Data sources	Project and institutional records and documentation Stakeholders including beneficiaries
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Waste separation** is a process by which waste is separated into different elements (glass, organic, metal, plastic, paper, etc.)
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. Waste Management & Research, 25(3), 234-240. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EEO51: Evidence of measures put in place to prevent potential chemicals spills from facilities involved in carrying out project activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO51: Evidence of measures put in place to prevent potential chemicals spills from facilities involved in carrying out project activities***
Indicator level	Output
Purpose of indicator	A chemical spill is defined as the uncontrolled release of a hazardous chemical, either as a solid, liquid or a gas. The challenges related to dealing with chemical spills will vary with the type and volume of chemical involved. In case there is a potential for spilling chemicals during project activities, there is a necessity to implement measures to reduce the potential for spills and have a plan for responding to chemical spills.
What the indicator measures	The indicator looks at the measures put in place in order to prevent potential chemicals spills from facilities involved in carrying out project activities
Data sources	Project and institutional records and documentation Municipal governments Media Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Chemical waste** is a waste that is made from harmful chemicals (mostly produced by large factories). Chemical waste may or may not be classed as hazardous waste. A chemical hazardous waste is a solid, liquid, or gaseous material that displays either a "Hazardous Characteristic" or is specifically "listed" by name as a hazardous waste. **Chemical spill** is defined as the uncontrolled release of a hazardous chemical, either as a solid, liquid or a gas
Further resources	LaGrega, M. D., Buckingham, P. L., & Evans, J. C. (2010). Hazardous waste management. Waveland Press. (link).

EEO52: Number of people trained in handling, collection and treatment of hazardous waste

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO52: Number of people trained in handling, collection and treatment of hazardous waste***
Indicator level	Output
Purpose of indicator	One of the major environmental issues for countries has been the management of hazardous wastes. This issue has manifested itself in the form of two questions: how to prevent environmental deterioration caused by the generation of hazardous wastes, and how to effectively clean up the problems caused by past examples of improper disposal. Common treatment (e.g. landfills) of hazardous waste can result in unfavourable amounts of hazardous materials in water, ground or air. Hazardous waste requires special treatment depending on the hazardous substance. For this reasons it is necessary to train people for appropriate handling, collection and treatment of hazardous waste.
What the indicator measures	The number of people who were trained to properly handle, collect and treat hazardous waste
Data sources	Project and institutional records and documentation Presentation list Absolved training Municipal governments Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Hazardous wastes** means wastes (liquids, solids, contained gases, or sludge) other than radioactive wastes which, by reason of their chemical activity or toxic, explosive, corrosive, or other characteristics, cause danger or likely will cause danger to health or the environment, whether alone or when coming into contact with other waste.
Further resources	Wang, L. K., Hung, Y. T., Lo, H. H., & Yapijakis, C. (Eds.). (2004). *Handbook of industrial and hazardous wastes treatment*. CRC Press. (link).

EEO53: Number and type of sustainable waste management measures designed/adopted with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO53: Number and type of sustainable waste management measures designed/adopted with project support***
Indicator level	Output
Purpose of indicator	Waste is a global issue. If not properly dealt with, waste poses a threat to public health and the environment. It is a growing issue linked directly to the way society produces and consumes. Not having a solid waste collection service has a direct health impact on residents, particularly children. It also leads to the environmental pollution. A proper waste management plan should be implemented to promote waste minimisation at source. The purpose of this indicator is to see whether a certain steps to sustainable waste management were made with the project support.
What the indicator measures	Number of sustainable waste management measures designed or adopted with the project financial or other support Type of sustainable waste management measures designed or adopted with the project financial or other support
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Waste management** or waste disposal is all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompasses the legal and regulatory framework that relates to waste management encompassing guidance on recycling.
Further resources	Giusti, L. (2009). A review of waste management practices and their impact on human health. *Waste management*, *29*(8), 2227-2239. (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EEO54: Life cycle assessment has been conducted for project products

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO54: Life cycle assessment has been conducted for project products***
Indicator level	Output
Purpose of indicator	The life-cycle of products begins with design, then proceeds through manufacture, distribution, use and then follows through the waste hierarchy's stages of reduce, reuse and recycle. Each of the above stages of the life-cycle offers opportunities for policy intervention, to rethink the need for the product, to redesign to minimize waste potential, to extend its use. The key behind the life-cycle of a product is to optimize the use of the world's limited resources by avoiding the unnecessary generation of waste. Using a lifecycle approach, it has been estimated that a 10 to 15% reduction in global greenhouse gas emissions could be achieved through landfill mitigation and diversion, energy from waste, recycling, and other types of improved solid waste management. Life cycle assessment is just one of an ever-growing set of assessment methods to support decisions regarding waste and resource management. A detailed comparison of waste management options in any specific context requires a detailed LCA, because the option considered 'better' can vary depending on the precise questions asked and the particular local circumstances at play.
What the indicator measures	This indicators tracks whether there has been conducted any life cycle assessment for products created/adopted or implemented by a project. Each LCA analysis is conducted on the basis of a particular set of detailed assumptions. This naturally restricts the applicability of the conclusions to a very specific local situation.
Data sources	Project and institutional records and documentation Regional and national reports Stakeholders
Methods of data collection	Desk research Interviews
Definition of key terms	**Life-Cycle Assessment or Analysis (LCA)** is a set of tools to quantify these impacts through the entire lifecycle. The traditional use of LCA was to compare products, with a relatively limited focus on end-of-life impacts. Recently, there has been a push to extend the scope systematically to explore resource and waste management.
Further resources	Lehtinen, H. et al. (2011). A Review of LCA Methods and Tools and their Suitability for SMEs (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EEO55: Number and type of strategies for reduction of waste production adopted

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO55: Number and type of strategies for reduction of waste production adopted***
Indicator level	Output
Purpose of indicator	Waste management is in contrast to waste minimisation. Waste management focuses on processing waste after it is created, concentrating on re-use, recycling, and waste-to-energy conversion rather than eliminating the creation of waste in the initial phases of production. Waste minimisation involves efforts to minimize resource and energy use during manufacture. For the same commercial output, usually the less material is used, the less waste is produced. Waste minimisation usually requires knowledge of the production process and detailed knowledge of the composition of the waste. Reducing waste should be seen as a primary focus for most waste management strategies.
What the indicator measures	Number of strategies for reduction of waste production which was adopted with the financial or other support of the project Type of strategies for reduction of waste production which was adopted with the financial or other support of the project
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Waste minimisation** is a process of elimination that involves **reducing the amount of waste** produced in society and helps to eliminate the generation of harmful and persistent wastes, supporting the efforts to promote a more sustainable society. Waste minimisation involves redesigning products and/or changing societal patterns, concerning consumption and production, of waste generation, to prevent the creation of waste.
Further resources	Wilson, D. C. et al. (2013). Benchmark indicators for Integrated Sustainable Waste Management (ISWM). (link).

EEO56: System of waste management adopted with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EEO56: System of waste management adopted with project support***
Indicator level	Output
Purpose of indicator	Waste management is a cross-cutting issue impacting on many aspects of society and the economy. It has strong linkages to a range of other global challenges such as health, climate change, poverty reduction, food and resource security and sustainable production and consumption. Developing a waste management system is complex. For a system to be sustainable in the long term, consideration needs to be given to physical elements (infrastructure), stakeholders involved and to strategic aspects including the political, health, institutional, social, economic, financial, environmental and technical facets.
What the indicator measures	The indicator ascertains any evidence of adoption of waste management system which was established with the financial or other support of project
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Waste management** or waste disposal is all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompasses the legal and regulatory framework that relates to waste management encompassing guidance on recycling.
Further resources	Giusti, L. (2009). A review of waste management practices and their impact on human health. *Waste management*, *29*(8), 2227-2239. (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EEO70: Degree, to which a project supported the production and use of energy from renewable sources

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EEO70: Degree, to which a project supported the production and use of energy from renewable sources***
Indicator level	Output
Purpose of indicator	Human activity is overloading our atmosphere with carbon dioxide and other global warming emissions, which trap heat, steadily drive up the planet's temperature, and create significant and harmful impacts on our health, our environment, and our climate. Electricity production generated by coal-fired power plants, highly contributes to global warming emissions. In contrary, the use of renewable energy has many potential benefits, including a reduction in greenhouse gas emissions, the diversification of energy supplies and a reduced dependency on fossil fuel markets (in particular, oil and gas). The growth of renewable energy sources may also have the potential to stimulate employment, through the creation of jobs in new 'green' technologies. Moreover, the renewable energy technologies can meet much of the growing demand at prices lower than those usually forecast for conventional energy.
What the indicator measures	The indicator measures the extent to which the project supported the production of energy from renewable sources in terms of number of funded projects, workshops, seminars, technologies - solar panels etc.
Data sources	Project and institutional records and documentation Presentation lists Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Renewable sources of energy** are sources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.
Further resources	Johansson, T. B., & Burnham, L. (Eds.). (1993). Renewable energy: sources for fuels and electricity. Island press. (link)

EEO71: Extent, to which a project relied on renewable sources of energy

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EEO71: Extent, to which a project relied on renewable sources of energy***
Indicator level	Output
Purpose of indicator	Our reliance upon fossil fuels such as coal and oil is negatively affecting the planet. Burning these fossil fuels increases the amount of carbon dioxide (CO2) that is released into the atmosphere, leading to a heightened greenhouse effect and warming of the earth. With governments trying to reduce CO2 emissions, renewable sources of energy (such as those derived from wind, the sun and waves) are presenting themselves as viable, eco-friendly options to meet the world's energy needs. Using more renewable energy can lower the prices of and demand for natural gas and coal by increasing competition and diversifying our energy supplies. An increased reliance on renewable energy can help protect consumers when fossil fuel prices spike.
What the indicator measures	The indicator measures the extent to which the project relied on renewable sources of energy. It may focus on a proportion of total consumption of renewable energy vs. energy from “conventional” sources (in % or in absolute terms).
Data sources	Project and institutional records and documentation Presentation lists Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Renewable sources of energy** are sources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.
Further resources	Johansson, T. B., & Burnham, L. (Eds.). (1993). Renewable energy: sources for fuels and electricity. Island press. (link)

EEO72: Examples of strategies for energy savings applied during the project realization

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EEO72: Examples of strategies for energy savings applied during the project realization***
Indicator level	Output
Purpose of indicator	There is growing number of initiatives which aim to increase the efficiency of energy use and reduce energy demand. The pressure is put on policy development and creation of the energy efficiency strategies. The key benefits of strategies are costs savings, promotion of economic growth, support of activity to revitalise infrastructure, contributing to a more secure and sustainable energy system and reducing reliance on energy imports, and cost-effective way to decarbonise. The purpose of this indicator is to identify whether there have been any future plans for more efficient use of energy.
What the indicator measures	The indicator ascertains any evidence of examples of applied strategies for energy savings during the project realization.
Data sources	Project and institutional records and documentation Policy documents Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Efficient energy use,** sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Improvements in energy efficiency are generally achieved by adopting a more efficient technology or production process or by application of commonly accepted methods to reduce energy losses.
Further resources	Greening, L. A., Greene, D. L., & Difiglio, C. (2000). Energy efficiency and consumption—the rebound effect—a survey. Energy policy, 28(6), 389-401. IEA. (2016). Energy efficiency market report 2016. (link)

EEO73: Number and type of more efficient technologies purchased/installed.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EEO73: Number and type of more efficient technologies purchased/installed.***
Indicator level	Output
Purpose of indicator	By deploying available technologies, emissions would evidently reduce without compromising economic growth, because most investment in energy-efficient technologies quickly pays for itself in lower operating costs. Below are technologies related to energy under three key areas of accelerating change which could help in efficient use of energy: Storage, Smart grid and Electricity generation. Energy storage involves new, cost-effective ways of storing energy, either in improved batteries, as new fuels or other ways. A smart grid is a set of technologies that pairs information with moving electricity around, enabling more efficient generation and use of energy. Electricity generation is characterized by technologies that generate power from unused sources and that more efficiently produce electric power or fuels from sources in use today.
What the indicator measures	The indicator measures number and type of more efficient technologies purchased or installed with a project financial or other support.
Data sources	Project and institutional records and documentation Presentation lists Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Efficient energy use,** sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Improvements in energy efficiency are generally achieved by adopting a more efficient technology or production process or by application of commonly accepted methods to reduce energy losses.
Further resources	Greening, L. A., Greene, D. L., & Difiglio, C. (2000). Energy efficiency and consumption—the rebound effect—a survey. Energy policy, 28(6), 389-401. Johansson, T. B., & Burnham, L. (Eds.). (1993). Renewable energy: sources for fuels and electricity. Island press. (link) IEA. (2016). Energy efficiency market report 2016. (link)

EEO74: Evidence of measures put in place to ensure energy savings in all project-related activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EEO74: Evidence of measures put in place to ensure energy savings in all project-related activities***
Indicator level	Output
Purpose of indicator	By using energy more efficiently, it can lower energy costs, reduce the reliance on external suppliers of oil and gas, and help protect the environment. Energy efficiency has to be increased at all stages of the energy chain, from generation to final consumption. The measures put in place should ascertain control over the energy savings and provide an overview of energy use. It could help to set new mechanisms or policies for further solutions.
What the indicator measures	This indicator should ascertain any kind of evidence of measures put in place in order to ensure energy savings in all project-related activities.
Data sources	Project and institutional records and documentation Municipalities Stakeholders
Methods of data - collection	Desk research Interviews Focus groups Survey
Definition of key terms	**Efficient energy use,** sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Improvements in energy efficiency are generally achieved by adopting a more efficient technology or production process or by application of commonly accepted methods to reduce energy losses.
Further resources	Greening, L. A., Greene, D. L., & Difiglio, C. (2000). Energy efficiency and consumption—the rebound effect—a survey. Energy policy, 28(6), 389-401. Johansson, T. B., & Burnham, L. (Eds.). (1993). Renewable energy: sources for fuels and electricity. Island press. (link) IEA. (2016). Energy efficiency market report 2016. (link)

EGO1: Project has equipped project participants, partners and other stakeholders with necessary knowledge to act in accordance with good environmental governance

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO1: Project has equipped project participants, partners and other stakeholders with necessary knowledge to act in accordance with good environmental governance***
Indicator level	Output
Purpose of indicator	Environmental governance is a rapidly growing field in applied human-environment scholarship with implications for practice. Governance refers to the broader processes and institutions through which societies make decisions that affect the environment. The benchmarks of "good" public governance include accountability, transparency, responsiveness, equity and inclusion, effectiveness and efficiency, following the rule of law, and participatory, consensus-oriented decision making. Governments are not, and in fact cannot be, the most important source of environmental decision-making authority. Decision making must now accommodate diverse views, networks and hybrid partnerships among state and non-state actors. In order to achieve consensus among stakeholders all participants have to have required knowledge and skills to act in accordance with good governance.
What the indicator measures	The indicator tracks any evidence of increasing knowledge and skills necessary to act in accordance with good environmental governance given to project participants, partners and other stakeholders through workshops, seminars, trainings etc.
Data sources	Project and institutional records and documentation Attendance lists Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups
Definition of key terms	**Environmental governance** as the means by which society determines and acts on goals and priorities related to the management of natural resources. This includes the rules, both formal and informal, that govern human behaviour in decision-making processes as well as the decisions themselves. Appropriate legal frameworks on the global, regional, national and local level are a prerequisite for good environmental governance
Further resources	Armitage, D., de Loë, R., & Plummer, R. (2012). Environmental governance and its implications for conservation practice. (link)

EGO2: Number and type of capacity-building tools and/or services delivered by the project to strengthen local environmental governance capacity

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO2: Number and type of capacity-building tools and/or services delivered by the project to strengthen local environmental governance capacity***
Indicator level	Output
Purpose of indicator	Environmental management is thought to be more effective when local communities are given responsibility; these communities including local governments are supposedly better placed to manage their neighboring environment and natural resources. This is done through enhancing their capacities and means to execute their institutional mandate, so they could efficiently and effectively govern over natural resources and their use. The types of 'capacity' needed by locals can include awareness, skills, knowledge, motivation, commitment, confidence, access to networks, technical options and funds. The capacity building tools (workshops, seminars, training, online tools etc.) will contribute to enhance the capacities of stakeholders to engage in national or sub-national policy analysis and dialogue processes related to environmental governance and management, contribute to generate, access and use information and knowledge to address environmental problems and find adequate solutions, and to contribute to strengthen capacities for development of or influence on strategy, policy and legislative frameworks.
What the indicator measures	The indicator tracks the number and type (characteristics, description) of capacity-building tools and/or services delivered by the project to strengthen local environmental governance capacity. Information on the type of stakeholders and the type of institution(s) they represent should also be collected.
Data sources	Project and institutional records and documentation Stakeholders Capacity-building materials, attendance lists
Methods of data collection	Desk research Survey Interviews Focus groups
Definition of key terms	**Capacity:** Ability to effectively design, plan, carry out, and monitor and evaluate the organization's core functions and scope of work. **Capacity building** is the process by which individual and organizations obtain, improve, and retain the skills and knowledge needed to do their jobs competently. **Environmental governance** as the means by which society determines and acts on goals and priorities related to the management of natural resources. This includes the rules, both formal and informal, that govern human behaviour in decision-making processes as well as the decisions themselves. Appropriate legal frameworks on the global, regional, national and local level are a prerequisite for good environmental governance
Further resources	WHO. (2017). Regulatory Strengthening and Capacity Building. (link) OECD. Enhancing capacity. A basis for green development. (link)

EGO3: Number and type of environmental educational and awareness-raising events organized

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO3: Number and type of environmental educational and awareness-raising events organized***
Indicator level	Output
Purpose of indicator	How we treat environment is fundamentally determined by our attitude to it; and our attitude in turn is largely shaped by moral and ethical values we hold. To protect our environment it is necessary to change our attitudes and behaviour. Environmental education and awareness is crucially important for achieving even a modest degree of global environmental sustainability and sustainable development.
What the indicator measures	The indicator tracks the number and type of environmental educational and awareness-raising events organized with financial or other project support.
Data sources	Project and institutional records and documentation Attendance lists Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups
Definition of key terms	**Environmental education** is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.
Further resources	Nath, B. (2016). Environmental education and awareness. (link)

EGO4: Number and type of environmental innovation projects supported

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO4: Number and type of environmental innovation projects supported***
Indicator level	Output
Purpose of indicator	The importance of technological and managerial improvement in improving environmental efficiency is becoming increasingly widely accepted. The environmental innovation is a product, process or organisational innovation that contributes to the economic, environmental and social pillars of sustainability. Innovation provides synergies between economic growth and environmental protection.
What the indicator measures	The indicator tracks the number and type (technological, process or institutional) of environmental innovations which project supported.
Data sources	Project and institutional records and documentation Official websites of concerned entities Stakeholders
Methods of data collection	Desk research, website and report content analysis Survey Interviews Focus groups
Definition of key terms	**Environmental innovations** are organizational implementations and changes focusing on the environment, with implications for companies' products, manufacturing processes and marketing, with different degrees of novelty. They can be merely incremental improvements that intensify the performance of something that already exists, or radical ones that promote something completely unprecedented, where the main objective is to reduce the company's environmental impacts.
Further resources	Clark, C., Foxon, T., Gross, R., & Jacobs, M. (2001). Innovation and the environment: challenges and policy options for the UK. (link)

EGO5: Number and type of supported environmental projects prepared by the target community

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO5: Number and type of supported environmental projects prepared by the target community***
Indicator level	Output
Purpose of indicator	Community participation is a prerequisite for successful projects. Of particular significance has been the role of the 'community' as the primary stakeholder in the project processes. Participation of the community, and its partnerships with other stakeholders, has become an important component of all environmental programmes and projects, both in terms of subsidiarity of decision-making processes, and of creating an enabling environment for the community to have a say over aspects that affect their lives.
What the indicator measures	The indicator tracks the number and type (characteristics, field of interest etc.) of environmental projects prepared by a community and supported by project.
Data sources	Project and institutional records and documentation Baseline and documentation of a new project Stakeholders
Methods of data collection	Desk research, content analysis Survey Interviews Focus groups
Definition of key terms	**Community participation** is the active involvement of people from communities preparing for, or reacting to a problem. True participation means the involvement of the people concerned in analysis, decision-making, planning, and project implementation.
Further resources	European Environment Agency. (2005). Sustainable use and management of natural resources. (link) USAID. Natural resource management. Basic concepts and strategies. (link)

EGO6: Incidences of participatory environmental decision and policy/regulation-making

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO6: Incidences of participatory environmental decision and policy/regulation-making***
Indicator level	Output
Purpose of indicator	Participatory methods are especially useful in the context of environmental decision-making due to the fact that environmental issues have such a widespread impact on a wide variety of stakeholders. Therefore, it is important that all voices that may be impacted are heard, and that the process clearly and accurately reflects the viewpoints When the public — specifically those who will be affected by the decision at stake — is included and has the opportunity to be actively involved in the process, the decisions made are generally of higher quality, are more transparent and democratic, and they allow participants to share their knowledge and learn from each other. It also has the ability to build bonds between stakeholders, which can be beneficial for future decisions. Because the participatory process ensures that all stakeholders are represented, decisions that resulted from a participatory decision-making process are often more successful in the implementation stage.
What the indicator measures	Stakeholders involved in consultations (or those omitted) Government representatives Consultation/feedback documents, final policy outputs
Data sources	Project and institutional records and documentation Municipal governments Stakeholders Policy tracking Content analysis of policy outputs and agreements
Methods of data collection	Desk research Survey Interviews, focus groups Participatory techniques (most significant change, storytelling etc.) Case studies Comparison in time
Definition of key terms	**Policy**: Policy is a set of rules and procedures that ensure legal representation of the interests of citizens through representative democracy. It lays out the vision, goals, and objectives for leadership and governance. Policies may include decisions, guidelines, legislations, and regulations. The main policy actors are political parties and politicians, elected members of the Parliament and local government. Participatory decision making **Participatory decision-making** is an open, consistent and continuous process that provides the opportunity for all individuals who are affected by a decision to have their suggestions/ideas represented in the decision-making process either through personal or representative participation; this includes both operational and policy decisions
Further resources	Overseas Development Institute (ODI). (2014). *Monitoring and evaluation of policy influence and advocacy.* Working paper 395. (link) - includes case studies.

EGO7: Number and type of environmentally-focused voluntary instruments launched

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO7: Number and type of environmentally-focused voluntary instruments launched***
Indicator level	Output
Purpose of indicator	The implementation of voluntary instruments (or voluntary environmental activities) at the corporate level is thus of great importance both for the business itself and for society as a whole. The preventive nature of the voluntary instruments leads to a sounder environment, thus significantly contributing to the realisation of sustainable production and consumption, or sustainable development. There are then other benefits at the corporate level, such as improved competitiveness, better image, and operational cost savings.
What the indicator measures	The indicator measures the number and type (characteristics) of environmentally focused voluntary instruments (methods, procedures, patterns of behaviour etc.) launched with financial or other support of project.
Data sources	Project and institutional records and documentation Municipal governments Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups Participatory techniques (most significant change, storytelling etc.) Case studies
Definition of key terms	**Voluntary instruments** describes such activities that lead towards a reduction in the negative environmental impacts of their activities, being introduced and implemented by the organizations based on a free (voluntary) decision and going beyond the requirements of legislation in force.
Further resources	Grolleau , G. & Mzoughi, N. (2003). Voluntary instruments for environmental management: a critical review of definitions. (link)

EGO8: Number and type of environmentally-focused economic instruments introduced

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO8: Number and type of environmentally-focused economic instruments introduced***
Indicator level	Output
Purpose of indicator	Governments can act through different public policy instruments in order to support behavioural change towards sustainability. Instruments can vary according to the degree of public intervention: from the most intense (regulatory instruments, also referred to as 'command-and-control' mechanisms) to a mix of incentives and disincentives (economic instruments) and to the least intense (educative/voluntary instruments). One of the most common categorisations of economic instruments distinguishes price-based instruments. We can differentiate between positive (incentives) and negative (disincentives) price-based instruments.
What the indicator measures	The indicator measures the number and type of environmentally-focused economic instruments introduced with help of the project
Data sources	Project and institutional records and documentation Municipal governments Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups Participatory techniques (most significant change, storytelling etc.) Case studies
Definition of key terms	**Economic Instruments** encompass a range of policy tools, from pollution taxes and marketable permits to deposit-refund systems and performance bonds. The common element of all economic instruments is that they effect change or influence behaviour through their impact on market signals
Further resources	Borrás, S., & Edquist, C. (2013). The choice of innovation policy instruments. (link) Panaiotov, T. (1994). Economic instruments for environmental management and sustainable development. UNEP. (link)

EGO9: Number and type of information-based instruments and education introduced/delivered

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGO9: Number and type of information-based instruments and education introduced/delivered***
Indicator level	Output
Purpose of indicator	Governments can act through different public policy instruments in order to support behavioural change towards sustainability. Instruments can vary according to the degree of public intervention. The least intense are educative and information based instruments. A key principle behind information-based instruments is that human behaviour is largely based on knowledge, beliefs, and values. Presumably, an information based instrument (e.g. campaign) would enlighten people to change the behaviour, since it would appear to be manifestly in their interest.
What the indicator measures	The indicator measures the number and type of environmentally-focused information based and education instruments introduced with help of the project
Data sources	Project and institutional records and documentation Municipal governments Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups Participatory techniques (most significant change, storytelling etc.) Case studies
Definition of key terms	**Information-based instruments** include attempts at influencing people through transfer of knowledge, communication of reasoned argument, and moral suasion in order to achieve a result. Information-based instruments can include flyers, pamphlets, booklets, training, advertisements, reports, websites, and portals.
Further resources	Borrás, S., & Edquist, C. (2013). The choice of innovation policy instruments. (link)

2. ENVIRONMENTAL SUSTAINABILITY OUTCOME INDICATORS – B.1 (QUAL.)

EERL1: Degree, to which a project may have modified environmental parameters of the intervention area

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL1: Degree, to which a project may have modified environmental parameters of the intervention area***
Indicator level	Outcome
Purpose of indicator	The environment is a complex, broad issue and it´s change could be measured by numerous indicators and parameters. Changes caused by any project are often hard to link *only* to the project influence; in the environment, many parameters are synchronised and would happen simultaneously even without any intervention. To uncover the project efficiency, a mixture of fine-scaled and general indicator is recommended, together with robust statistical tool. Such a method works only with extensive data collection/monitoring during the project, so that the project progress might be well documented.
What the indicator measures	The indicator measures the extent to which the project modifies environmental parameters of the intervention area, if possible to directly associate with project
Data sources	Project and institutional reports and documentation Regional and national statistics Stakeholders
Methods of data collection	Desk research Interviews Focus group discussions Survey
Definition of key terms	**Environmental change** is a change or disturbance of the environment most often caused by human influences and natural ecological processes. Environmental changes can include any number of things, including natural disasters, human interferences, or animal interaction. Environmental change does not only encompass physical changes, but it can be things like an infestation of invasive species is also environmental changes
Further resources	Grant, I.,F. Environmental Parameters. Natural Resources Institute, University of Greenwich at Medway, Central Avenue, Chatham Maritime, Kent ME4 4TB, UK (link)

EERL2: Degree and direction to which a projects may have influenced climate change and climate change mitigation actions

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL2: Degree and direction to which a projects may have influenced climate change and climate change mitigation actions***
Indicator level	Outcome
Purpose of indicator	To prove, that any project has influenced "climate change", would be worth of Nobel price and almost any project, except the global ones, can´t claim such an influence (except the negative effect of bad projects ; e.g. producing a huge amounts of pollutants). However, it is possible to be efficient at more local scale, and claim some influence at regional level. Ways, how to mitigate climate change are many and some of them are not appropriate in particular cases (e. g. "violent" afforestation might lead to loss of local biodiversity, which negative effect can overweight the positive effect of carbon sequestration). Many methods, leading to climate change mitigation, are indirect and almost impossible to measure, yet probably very effective (e.g. biodiversity preservation). Hence, a precaution must be taken when evaluating such an effect and a sophisticated monitoring and evaluation design must be involved.
What the indicator measures	The indicator measures the extent to which the project may have influenced climate change and climate change mitigation actions, if possible to directly associate with project
Data sources	Project and institutional reports and documentation Regional and national statistics Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Climate change** also called global warming, refers to the rise in average surface temperatures on Earth. An overwhelming scientific consensus maintains that climate change is due primarily to the human use of fossil fuels, which releases carbon dioxide and other greenhouse gases into the air. The gases trap heat within the atmosphere, which can have a range of effects on ecosystems, including rising sea levels, severe weather events, and droughts that render landscapes more susceptible to wildfires. **Climate change** mitigation consists of actions to limit the magnitude or rate of long-term climate change. Climate change mitigation generally involves reductions in human (anthropogenic) emissions of greenhouse gases (GHGs). Mitigation may also be achieved by increasing the capacity of carbon sinks, e.g., through reforestation. Mitigation policies can substantially reduce the risks associated with human-induced global warming.
Further resources	Intergovernmental Panel on Climate Change. (2015). *Climate change 2014: mitigation of climate change* (Vol. 3). Cambridge University Press. (link)

EERL3: Degree, to which the project may have disturbed local ecosystem stability and/or decreased the ecosystem's ability to maintain biodiversity or provide other ecosystem services

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL3: Degree, to which the project may have disturbed local ecosystem stability and/or decreased the ecosystem's ability to maintain biodiversity or provide other ecosystem services***
Indicator level	Outcome
Purpose of indicator	The ecosystem is an artificial unit, which refers to a complex environment consisting of a wide scale of biotopes and has inherent characters such as self-keeping, self - regulation etc. Most of them are dynamical systems, which are able to cope with a wide scale of disturbances, while the response to the disturbance could take from years to centuries to come. Therefore, in a case of lighter and/or less obvious disturbances, it is often almost impossible to link them to any ecosystem´s pattern of behaviour and long-term observation is needed. In a case of obvious large and/or heavy disturbances like mechanical destruction of a large part of the ecosystem, the rough extent of the actual damage could be estimated via structural parameters or biodiversity loss, thus that doesn´t say that much about its future behaviour and possibility of potential recovery.
What the indicator measures	The indicator measures the extent to which the project may have disturbed local ecosystem and/or decreased the ecosystem's ability to maintain biodiversity or provide other ecosystem services, if possible to directly associate with project
Data sources	Project and institutional reports and documentation Regional and national statistics Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Ecosystem** is a community of living organisms in conjunction with the non-living components of their environment (things like air, water and mineral soil), interacting as a system. It refers to both biotic factors as well as abiotic factors. An ecosystem is self-supporting. These biotic and abiotic components are regarded as linked together through nutrient cycles and energy flows. As ecosystems are defined by the network of interactions among organisms, and between organisms and their environment **Ecosystem services** are regularly involved in the provisioning of clean drinking water and the decomposition of wastes. While scientists and environmentalists have discussed ecosystem services implicitly for decades, the Millennium Ecosystem Assessment (MA) in the early 2000s popularized the concept. There, ecosystem services are grouped into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and crop pollination; and cultural, such as spiritual and recreational benefits. **Biodiversity** is the variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems.
Further resources	Tilman, D. (1996). Biodiversity: population versus ecosystem stability. Ecology, 77(2), 350-363. (link).

EERL4: Evidence of increased awareness and consideration of environmental aspects by project partners and beneficiaries

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL4: Evidence of increased awareness and consideration of environmental aspects by project partners and beneficiaries***
Indicator level	Outcome
Purpose of indicator	Environmental education and awareness is crucially important for achieving even a modest degree of global environmental sustainability and sustainable development. Proposing projects that build social and environmental considerations into the design process initially requires an understanding of the current project development process, as well as identifying areas for potential change.
What the indicator measures	This indicator should ascertain any kind of evidence of increase awareness and consideration of environmental aspects by project partners and beneficiaries which were supported directly or indirectly by the project
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Environmental education** is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions.
Further resources	Nath, B. (2016). Environmental education and awareness. (link)

EERL5: Evidence of changed behaviour patterns of local inhabitants in relation to their natural resources

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL5: Evidence of changed behaviour patterns of local inhabitants in relation to their natural resources***
Indicator level	Outcome
Purpose of indicator	The purpose of indicator is to identify any behaviour change, positive or negative, related to waste generation in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to the waste generation affected by project intervention.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour.
Further resources	Ferrara, I., & Serret, Y. (2008). Household Behaviour and the Environment, Reviewing the Evidence. Organization for Economic Cooperation and Development: Paris, France, 153-180. (link)

EERL6: Evidence of development of alternative livelihoods opportunities that decrease the pressure on forest and land resources

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL6: Evidence of development of alternative livelihoods opportunities that decrease the pressure on forest and land resources***
Indicator level	Outcome
Purpose of indicator	Rapidly changing environmental, social and economic drivers, such as climate change, are threatening ecosystems, the services they provide and the livelihoods of those dependent on these services. Enhanced socio-economic sustainability will ensure that livelihood options are available in a changing environment, and can support dependent communities. It is a key to support the alternative livelihoods opportunities that decrease the pressure on environment, e.g. protect forests and land resources.
What the indicator measures	This indicator should ascertain any kind of evidence of development of alternative livelihood opportunities that decrease the pressure on forest and land resource which were introduced directly or indirectly with the project support
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Interviews Focus group discussion Survey
Definition of key terms	**Livelihood** refers to their "means of securing the basic necessities -food, water, shelter and clothing- of life". Livelihood is defined as a set of activities, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments (both human and material) for meeting the requirements of the self and his/her household on a sustainable basis with dignity.
Further resources	Adeel, Z., & Safriel, U. (2008). Achieving sustainability by introducing alternative livelihoods. Sustainability Science, 3(1), 125-133. Mansfield, D., & Pain, A. (2005). Alternative livelihoods: substance or slogan? (link) – case study

EERL7: Existence of community groups or a program that monitor local natural resources, their preservation or sustainable exploitation

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL7: Existence of community groups or a program that monitor local natural resources, their preservation or sustainable exploitation***
Indicator level	Outcome
Purpose of indicator	Community based monitoring (CBM) of natural resources is a mechanism to engage communities in natural resource management in ways that contribute to local sustainability. CBM of natural resources is also known as participatory monitoring - systematic collection of information at regular intervals for initial assessment and for the monitoring of change. CBM of natural resources enables community members affected by a particular environmental condition or resource depletion to collect data on changes in natural resources, and on the socio-economic conditions of communities dependent on these resources. They can then analyse the data; feedback relevant information to the government or relevant organizational bodies; and take informed decisions on their own management of natural resources.
What the indicator measures	This indicator should ascertain any kind of existence of community groups or a program that monitor local natural resources, their preservation or sustainable exploitation which were supported directly or indirectly by the project.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal representatives Citizens, specific stakeholder groups Citizen engagement outputs and tools (communication, events, reports etc.)
Methods of data collection	Interviews Focus group discussion Survey Desk research
Definition of key terms	**Community-based monitoring** is a form of public oversight, ideally driven by local information needs and community values, to increase the accountability and quality of social services such as health, development aid, or to contribute to the management of natural resources. Within the CBM framework, members of a community affected by a social program or environmental change track this change and its local impacts, and generate demands, suggestions, critiques and data that they then act on, including by feeding back to the organization implementing the program or managing the environmental change.
Further resources	Vaughan, H. et al. (2001). Monitoring long-term ecological changes through the ecological monitoring and assessment network: science-based and policy relevant. (link)

EERL8: Perceived increased control over local resources by local community/project participants

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL8: Perceived increased control over local resources by local community/project participants***
Indicator level	Outcome
Purpose of indicator	Protecting environment including local resources requires engaging with, and providing benefits for, local communities
What the indicator measures	This indicator should capture whether people in targeted area perceive increased control over local resources by local community/project participants
Data sources	Stakeholders
Methods of data collection	Interviews Focus group discussion Survey
Definition of key terms	Community participation Community ownership
Further resources	Brooks, J. S., Waylen, K. A., & Mulder, M. B. (2012). How national context, project design, and local community characteristics influence success in community-based conservation projects. (link)

EERL9: Evidence of decreasing deforestation rates

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERL9: Evidence of decreasing deforestation rates***
Indicator level	Outcome
Purpose of indicator	Ending deforestation is our best chance to conserve wildlife and defend the rights of forest communities. On top of that, it's one of the quickest and most cost effective ways to curb global warming. The causes of deforestation and degradation vary from region to region. In the tropics, agribusiness clears forests to make space for things like cattle ranching, palm oil and soy plantations for animal feed. Demand for wood products can threaten forests around the world, whether it is for throw-away paper products or hardwood flooring. Deforestation has become the greatest threat to biodiversity and species existence across the world.
What the indicator measures	This indicator should ascertain any kind of evidence of decrease deforestation which was caused directly or indirectly by the project.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Deforestation** is the permanent destruction of forests in order to make the land available for other uses. The most common reasons are: housing, urbanization, commercial items, fuel, oil, room for cattle ranching, etc.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. In New Vistas in Agroforestry (pp. 5-17). Springer Netherlands. (link)

EERL20: Degree, to which a project has contributed to the increase/decrease of concentrations of major air pollutants

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERL20: Degree, to which a project has contributed to the increase/decrease of concentrations of major air pollutants***
Indicator level	Outcome
Purpose of indicator	Air pollutants are one of the major causes of environmental damage. They differ in a way, level and extent of influence: some of them affect the environment directly, whereas others store in the ecosystems/bodies and cause long-term disruptions in the ecosystem/metabolism. The industrial pollutants strongly affect climate and contribute to the anthropic climate change. Decrease in level of these pollutants means a significant improvement to any environment affected.
What the indicator measures	The indicator measures the extent to which the project may have contributed to the increase/decrease of concentration of major air pollutants. It is possible to use testing methods for air pollution; however it requires the knowledge of air pollution prior the intervention and still it would be difficult to evaluate the direct influence of the project. Or there is an option to look at processes/ technologies used throughout the project and estimate whether it would lead to increase/decrease of the air pollutant.
Data sources	Project and institutional records and documentation Own measurements Municipalities Stakeholders
Methods of data collection	Desk research Testing methods Interviews Focus group discussion Survey
Definition of key terms	**Air pollution** is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases, which can be fatal.
Further resources	TERI (2015). Air pollution and health. (link). Wark, K., & Warner, C. F. (1981). Air pollution: its origin and control.

EERL21: Evidence of use of products or technologies purchased/installed that lower emissions

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERL21: Evidence of use of products or technologies purchased/installed that lower emissions***
Indicator level	Outcome
Purpose of indicator	Air pollutions from the traffic, local resources and larger industrial installations can affect negatively local and even global environment. Modern technologies can minimize this thread, if installed correctly. However, the effect of these technologies is linked to the extent of the damage caused by the pollution resource; large factories produce far more pollutants than average traffic and lowering its emissions is far more important. Therefore, the evidence of the emission-lowering technologies should be weighed by the kind and size of the pollution.
What the indicator measures	This indicator should ascertain any kind of evidence of products or technologies that lower emissions which were purchased or installed with project support
Data sources	Project and institutional records and documentation Municipalities Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Desk research
Definition of key terms	**Low emission technologies** use a range of key advanced technologies to significantly reduce greenhouse gas emissions levels, air-borne pollutants and other environmental impacts.
Further resources	WHO (2016). Ambient air quality and health. Fact sheet. (link)

EERL22: Perceived improved quality of air

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERL22: Perceived improved quality of air***
Indicator level	Outcome
Purpose of indicator	Air pollution is among the leading global risks for mortality and responsible for increasing risk for chronic diseases. Community perceptions on exposure are critical in determining people's response and acceptance of related policies. Therefore, understanding people' perception is critical in informing the design of appropriate intervention measures.
What the indicator measures	This indicator should capture the way/level of how people in targeted area perceive air quality compared to baseline (situation prior the intervention).
Data sources	Stakeholders
Methods of data collection	Interviews Survey Focus Groups
Definition of key terms	**Air quality** is the composition of the air in terms of how much pollution it contains **Air pollution** is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases, which can be fatal.
Further resources	Akimoto, H. (2003). Global air quality and pollution. (link) Bickerstaff, K. (2004). Risk perception research: socio-cultural perspectives on the public experience of air pollution. Egondi, T. et al. (2013). Community perceptions of air pollution and related health risks in Nairobi slums. (link)

EERL23: Perceived improved quality of health as a result of improved air quality

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERL23: Perceived improved quality of health as a result of improved air quality***
Indicator level	Outcome
Purpose of indicator	Air pollution increases the risk of respiratory and heart disease in the population. Both short and long term exposure to air pollutants have been associated to health impacts. More severe impacts affect people who are already ill. Children, the elderly and poor people are more susceptible. Air pollution is a major environmental health problem affecting everyone. Exposure to air pollutants is largely beyond the control of individuals and requires action by public authorities at the national, regional and even international levels. Nonetheless, understanding people' perception is critical in informing the design of appropriate intervention measures.
What the indicator measures	This indicator should capture whether people perceive improved quality of health as a result of improved air quality
Data sources	Stakeholders
Methods of data collection	Interviews Focus Groups Survey
Definition of key terms	**Air quality** is the composition of the air in terms of how much pollution it contains **Air pollution** is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases, which can be fatal.
Further resources	Egondi, T. et al. (2013). Community perceptions of air pollution and related health risks in Nairobi slums. (link) WHO. (2006). Air Quality Guidelines: Global Update 2005. Particulate Matter, Ozone, Nitrogen Dioxide and Sulfur Dioxide. (link)

EERL24: Evidence of changed behaviour patterns of local inhabitants with respect to high-emission-producing behaviour

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERL24: Evidence of changed behaviour patterns of local inhabitants with respect to high-emission-producing behaviour***
Indicator level	Outcome
Purpose of indicator	The purpose of indicator is to identify any behaviour change, positive or negative, related to waste generation in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to the waste generation affected by project intervention.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour.
Further resources	Ferrara, I., & Serret, Y. (2008). Household Behaviour and the Environment, Reviewing the Evidence. (link)

EER30: Degree to which the project influenced the demand/supply ratio for water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EER30: Degree, to which the project influenced the demand/supply ratio for water***
Indicator level	Outcome
Purpose of indicator	The ideal situation is when supply meets demand and vice versa. Water scarcity occurs where and when water resources are not enough to meet all the demand and this affects equally the service of water provisioning and the ecosystem needs. It seems likely that demand and supply can be brought into a sustainable balance by changing and moderating the pattern of demand, or by introducing new sources of supply, or both. Above all, water losses should be minimized and water use efficiency increased substantially. The purpose of this indicator is to find out whether project affected any demand/supply ratio in both ways; put them in more balance or the opposite.
What the indicator measures	The indicator measures the extent to which the project influenced positively or negatively water supply/demand relationship
Data sources	Project records Stakeholders
Methods of data collection	Desk research Focus groups discussion Survey Interviews
Definition of key terms	**Supply demand ratio** - In an ideal situation the ratio is 1:1. This would mean that every customer will get their needs fulfilled, and every provider will be able to sell all their products or services. In terms of water management, it means that water demand is fulfilled by adequate quantity of water (supply).
Further resources	Vörösmarty, C. J., Green, P., Salisbury, J., & Lammers, R. B. (2000). Global water resources: vulnerability from climate change and population growth. (link) Cai, X. & Rosegrant, M. W. (2002). Global water demand and supply projections: Part 1. A modeling approach. Water International, 27(2), 159-169.

EER31: Effects of project on water use patterns in project-affected communities/facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EER31: Effects of project on water use patterns in project-affected communities/facilities***
Indicator level	Outcome
Purpose of indicator	Future water demand is a main consideration in water system management. Water management is nowadays a huge challenge worldwide. To properly manage more equitable and efficient water allocation, it is essential to understand the drivers of water use as well as water use patterns and affect them accordingly.
What the indicator measures	This indicator detects any effect of project on water use patterns and habits in targeted communities, both positive and negative.
Data sources	Stakeholders including beneficiaries Project reports
Methods of data collection	Interviews Focus group discussion Survey Observation
Definition of key terms	**Water resource management** is the activity of planning, developing, distributing and managing the optimum use of water resources. It is a sub-set of water cycle management. Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands.
Further resources	Gleick, P. H. (2003a). Global Freshwater Resources: Soft-Path Solutions for the 21st Century. (link) Gleick, P. H. (2003b). Water Use. Annual Review of Environmental Resources. (link)

EER32: Perceived quality of water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EER32: Perceived quality of water***
Indicator level	Outcome
Purpose of indicator	Water safety and quality are fundamental to human development and well-being. Providing access to safe water is one of the most effective instruments in promoting health and reducing poverty. Improving water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally by 2030 became a priority within the development frame of the SDGs.
What the indicator measures	This indicator should capture the way/level of how people in targeted area perceive water quality compared to baseline (situation prior the intervention).
Data sources	Beneficiaries
Methods of data collection	Interviews Focus groups
Definition of key terms	**Water quality** is determined by comparing the physical and chemical characteristics of a water sample with water quality guidelines or standards. Drinking water quality guidelines and standards are designed to enable the provision of clean and safe water for human consumption, thereby protecting human health.
Further resources	Bartram, J., Lewis, K., Lenton, R., & Wright, A. (2005). Focusing on improved water and sanitation for health. The Lancet, 365(9461), 810-812. (link) Wright, J., Gundry, S., & Conroy, R. (2004). Household drinking water in developing countries: a systematic review of microbiological contamination between source and point-of-use. (link) WHO. (2015). Progress on sanitation and drinking water: 2015 update and MDG assessment. (link)

EER33: Evidence of decreased water pollution from agricultural activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EER33: Evidence of decreased water pollution from agricultural activities***
Indicator level	Outcome
Purpose of indicator	Agriculture is a dominant component of the global economy. The pressure to produce enough food has had a worldwide impact on agricultural practices. In many countries, food requirements have required expansion of irrigation and steadily increasing use of fertilizers and pesticides to achieve and sustain higher yields. Agriculture is a cause of water pollution (mainly non-point source) through its discharge of pollutants and sediment to surface and/or groundwater, through net loss of soil by poor agricultural practices, and through salinization and waterlogging of irrigated land. The primary agricultural pollutants are nutrients (particularly nitrogen and phosphorus), sediment, animal wastes, pesticides, and salts.
What the indicator measures	This indicator should ascertain any kind of evidence of decrease water pollution from agricultural activities which was caused directly or indirectly by the project
Data sources	Stakeholders including target group, project and institutional records, national statistics
Methods of data collection	Focus group discussions Surveys Interviews Desk research Storytelling
Definition of key terms	**Water pollution**. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). This form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds. **Non-point source water pollution**, once known as "diffuse" source pollution, arises from a broad group of human activities for which the pollutants have no obvious point of entry into receiving watercourses.
Further resources	Directorate, O. E. (2008). OECD Key Environmental Indicators. (link) Ongley, E. D. (1996). *Control of water pollution from agriculture* (No. 55). Food & Agriculture Org. (link) Schwarzenbach, R. P., Egli, T., Hofstetter, T. B., von Gunten, U., & Wehrli, B. (2010). Global water pollution and human health. *Annual Review of Environment and Resources*, *35*, 109-136. (link)

EERL34: Evidence of decreased water pollution from industrial activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERL34: Evidence of decreased water pollution from industrial activities***
Indicator level	Outcome
Purpose of indicator	Industrial pollution is the release of wastes and pollutants generated by industrial activities into the natural environments including air, water, and land. Additionally, industrial pollution is linked to the degradation of the natural environment. Industry is a huge source of water pollution, it produces pollutants that are extremely harmful to people and the environment. It is mostly caused by lack of strict policies or by using outdated technology.
What the indicator measures	This indicator should ascertain any kind of evidence of decrease water pollution from industrial activities which was caused directly or indirectly by the project
Data sources	Stakeholders including target group, project and institutional records, national statistics
Methods of data collection	Focus group discussions Surveys Interviews Desk research Storytelling
Definition of key terms	**Water pollution**. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). This form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds.
Further resources	Directorate, O. E. (2008). OECD Key Environmental Indicators. (link) Goel, P. K. (2006). Water pollution: causes, effects and control. New Age International. (link) Schwarzenbach, R. P. et al. (2010). Global water pollution and human health. Annual Review of Environment and Resources, 35, 109-136. (link)

EERL35: Evidence of decreased water pollution from households

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERL35: Evidence of decreased water pollution from households***
Indicator level	Outcome
Purpose of indicator	Besides agricultural and industrial activities, households are one of the main producers of water pollution. The lack of adequate sewage and waste disposal, and disposal of solid waste make many localities, creates an important source of ground but also surface water pollution and potential health hazard areas for their inhabitants. The pollutants are usually pathogens, silt and suspended solid particles such as soils, sewage materials, disposed foods, cosmetics, automobile emissions, construction debris and eroded banks from rivers and other waterways.
What the indicator measures	This indicator should ascertain any kind of evidence of decrease water pollution from households which was caused directly or indirectly by the project
Data sources	Stakeholders including target group, project and institutional records, national statistics
Methods of data collection	Focus group discussions Surveys Interviews Desk research Storytelling
Definition of key terms	**Water pollution**. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). This form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds.
Further resources	Directorate, O. E. (2008). OECD Key Environmental Indicators. (link) Goel, P. K. (2006). Water pollution: causes, effects and control. New Age International. (link) Schwarzenbach, R. P. et al. (2010). Global water pollution and human health. *Annual Review of Environment and Resources*, *35*, 109-136. (link) Galadima, A. et al. (2011). Domestic Water Pollution among Local Communities in Nigeria. Causes and Consequences. *European Journal of Scientific Research*, *52*(4), 592-603. (link)

EERL36: Evidence of decreased water pollution from any or all supported sector(s)

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERL36: Evidence of decreased water pollution from any or all supported sector(s)***
Indicator level	Outcome
Purpose of indicator	Besides the major water polluters such as agricultural, industrial or household sectors, development cooperation may focus on other, less targeted sectors or activities that may have a significant impact on water quality in a specific locality. Such initiatives may focus on providing adequate sewage and waste disposal, and disposal of solid waste or on eliminating other significant sources of ground and surface water pollution.
What the indicator measures	This indicator should ascertain any kind of evidence of decrease water pollution in the supported sector(s)/area of activities in the target locality.
Data sources	Stakeholders including target group, project and institutional records, national statistics
Methods of data collection	Focus group discussions Surveys Interviews Desk research Storytelling
Definition of key terms	**Water pollution**. Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). This form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds.
Further resources	Directorate, O. E. (2008). OECD Key Environmental Indicators. (link) Goel, P. K. (2006). Water pollution: causes, effects and control. New Age International. (link) Schwarzenbach, R. P. et al. (2010). Global water pollution and human health. *Annual Review of Environment and Resources*, *35*, 109-136. (link)

EERL37: Evidence of changed behaviour patterns of local inhabitants in relation to water resources protection

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERL37: Evidence of changed behaviour patterns of local inhabitants in relation to water resources protection***
Indicator level	Outcome
Purpose of indicator	The need for water source protection has often been neglected. As a consequence, many drinking water sources became contaminated making water purification measures indispensable. Recently, adequate water source protection has been recognised as the most suitable and cost-effective method to keep contaminants out of drinking water and to make costly water purification measures and the construction of new wells unnecessary. Implementing water source protection requires a legal framework as well as involvement of locals in preventing of pollution, enabling treatment activities and restoring ecosystems.
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to the water resource protection (in terms of prevention, treatment and restoring ecosystem) affected by project intervention.
Data sources	Stakeholders including target group Project and institutional records
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour. **Water resource protection** involves the protection of surface water sources and the protection of groundwater sources from contamination of any kind. Water source protection includes basic measures and rules such as the installation of a fence around the source or the banning of grazing animals in the surrounding area.
Further resources	UNEP (2010): Clearing the Waters. A Focus on Water Quality Solutions. Oakland: United Nations Environment Programme (UNEP). (link) WHO (2006): Protecting Groundwater for Health. Managing the Quality of Drinking-water Sources. London: World Heath Organization (WHO). (link)

EERL38: Evidence of increased use of rain water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERL38: Evidence of increased use of rain water***
Indicator level	Outcome
Purpose of indicator	Meeting a continuous and ever increasing demand for water requires efforts to compensate for natural variability, and to improve the quality and quantity available. Areas on the planet that have long been facing water shortage were able to combat this problem by harvesting what little rain water they received. Using rainwater significantly contributes to economic, social and environmental benefits.
What the indicator measures	This indicator should ascertain any kind of evidence of increased use of rain water (e.g. installed tanks, installed pits, rain water harvesting systems, micro and macro catchments, etc.) in project targeted areas
Data sources	Stakeholders including beneficiaries Project reports and documentation
Methods of data collection	Interviews Focus group discussion Survey Observation Desk research
Further resources	Boers, T. M., & Ben-Asher, J. (1982). A review of rainwater harvesting. (link) Gowing, J. W., Mahoo, H. F., Mzirai, O. B., & Hatibu, N. (1999). Review of rainwater harvesting techniques and evidence for their use in semi-arid Tanzania. (link)

EERL50: Evidence of changed behaviour patterns of local inhabitants in relation to waste generation

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERL50: Evidence of changed behaviour patterns of local inhabitants in relation to waste generation***
Indicator level	Outcome
Purpose of indicator	The growing volume of waste being produced is a particularly visible manifestation of the process of economic growth and consumption. As a consequence, the effective management of waste (at every level) has become increasingly important for environmental stability and protection. Changing waste management behaviour is not a simple or straightforward exercise. The purpose of indicator is to identify any behaviour change, positive or negative, related to waste generation in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to the waste generation affected by project intervention.
Data sources	Stakeholders including beneficiaries Project reports and documentation
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour. **Waste generation:** quantity of materials or products that enter a waste stream before composting, incinerating, landfilling, or recycling.
Further resources	Davies, A., Fahy, F., & Taylor, D. (2005). Mind the gap! Householder attitudes and actions towards waste in Ireland. (link). EC. (2007). A New Approach to Investigating Household Waste Management Behaviour (link) Ferrara, I., & Serret, Y. (2008). Household Behaviour and the Environment, Reviewing the Evidence. (link)

EERL51: Evidence of changed waste separation, collection and recycling patterns in project-affected communities/facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERL51: Evidence of changed waste separation, collection and recycling patterns in project-affected communities/facilities***
Indicator level	Outcome
Purpose of indicator	The reduction of amount of waste which needs to be further treated is a goal of an effective waste management and follows the trend towards circular economy. It requires that resources are fully valued, financially and environmentally. The purpose is to cut resource loses on the way through increased recycling, reusing and more sustainable production and consumption. To change the pattern of waste management behaviour at all levels including household and individual in a positive manner is a key to reduction of waste disposed at landfills or in incinerator. The purpose of this indicator is to track changes of behavioural patterns either negative or positive which were influenced by the project.
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to waste separation, collection and recycling patterns in project-affected communities/facilities.
Data sources	Stakeholders including beneficiaries Municipalities Regional statistic/legislation Project reports and documentation
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Waste collection** is the collection of solid waste from point of production (residential, industrial commercial, institutional) to the point of treatment or disposal. **Waste separation** is a process by which waste is separated into different elements (glass, organic, metal, plastic, paper, etc.) **Recycling** is a resource recovery practice that refers to the collection and reuse of waste materials such as empty beverage containers. The materials from which the items are made can be reprocessed into new products. Material for recycling may be collected separately from general waste using dedicated bins and collection vehicles, a procedure called kerbside collection.
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERL52: Evidence of introduction of (financial) incentive schemes to encourage recycling

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EER52: Evidence of introduction of (financial) incentive schemes to encourage recycling***
Indicator level	Outcome
Purpose of indicator	Changing householder behaviour is vital to drive forward household waste reduction, reuse and recycling performance. It is believed that household incentives can be an effective way to engage with householders and encourage them to manage their waste more sustainably. It is believed that it is better to reward householders for doing the right thing with their waste than to penalise them for doing the wrong thing. An incentive scheme therefore rewards people who recycle or re-use their waste, giving them either a community or an individual reward with the aim of motivating people to take action.
What the indicator measures	Any kind of evidence of introduction actions of financial or other incentive schemes to encourage recycling among targeted population with a project financial or other support.
Data sources	Stakeholders including beneficiaries Presentation lists Media Municipalities Regional statistic/legislation Project reports and documentation
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Incentive scheme for recycling** aims to motivate people to recycle and reuse their waste by rewarding these actions with either a community or individual reward. **Recycling** is a resource recovery practice that refers to the collection and reuse of waste materials such as empty beverage containers. The materials from which the items are made can be reprocessed into new products. Material for recycling may be collected separately from general waste using dedicated bins and collection vehicles, a procedure called kerbside collection.
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERL53: Evidence of appropriate handing of hazardous waste

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERL53: Evidence of appropriate handing of hazardous waste***
Indicator level	Outcome
Purpose of indicator	One of the major environmental issues for countries has been the management of hazardous wastes. This issue has manifested itself in the form of two questions: how to prevent environmental deterioration caused by the generation of hazardous wastes, and how to effectively clean up the problems caused by past examples of improper disposal. Common treatment (e.g. landfills) of hazardous waste can result in unfavourable amounts of hazardous materials in water, ground or air. Hazardous waste requires special treatment depending on the hazardous substance.
What the indicator measures	Any kind of evidence of appropriate handling of hazardous waste with the financial or other support of project.
Data sources	Stakeholders including beneficiaries Municipalities Regional statistic/legislation Project and institutional reports and documentation
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Hazardous wastes** means wastes (liquids, solids, contained gases, or sludge) other than radioactive wastes which, by reason of their chemical activity or toxic, explosive, corrosive, or other characteristics, cause danger or likely will cause danger to health or the environment, whether alone or when coming into contact with other waste.
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERL54: Measures have been taken to adequately dispose of all project products at the end of their life cycle

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERL54: Measures have been taken to adequately dispose of all project products at the end of their life cycle***
Indicator level	Outcome
Purpose of indicator	The life-cycle of products begins with design, then proceeds through manufacture, distribution, use and then follows through the waste hierarchy's stages of reduce, reuse and recycle and dispose. The items are disposed when they cannot be used by any means again. The measurement taken should provide a control over the disposal of the products that were financially or in other way supported by a project and ensure the adequate way of disposal according the type of product and materials from which it is made.
What the indicator measures	Any kind of evidence that measures have been take to adequately dispose project products at the end of their life cycle.
Data sources	Stakeholders including beneficiaries Project reports and documentation
Methods of data collection	Surveys Interviews Desk research
Definition of key terms	**Life-Cycle of product** is consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal. Life cycle stages include acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment and final disposal
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERL55: Evidence of application of proper waste management in target area

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERL55: Evidence of application of proper waste management in target area***
Indicator level	Outcome
Purpose of indicator	Waste management is a cross-cutting issue impacting on many aspects of society and the economy. Developing a waste management system is complex and very specific for each geographical context. For a system to be sustainable in the long term, consideration needs to be given to physical elements (infrastructure), stakeholders involved and to strategic aspects including the political, health, institutional, social, economic, financial, environmental and technical facets. The application of a proper waste management in any specific context requires a detailed life-cycle assessment of products, because the option considered 'better' can vary depending on the precise questions asked and the particular local circumstances at play.
What the indicator measures	The indicator should ascertain any evidence of application of proper waste management in targeted area.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**Waste management** or waste disposal is all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompasses the legal and regulatory framework that relates to waste management encompassing guidance on recycling.
Further resources	Giusti, L. (2009). A review of waste management practices and their impact on human health. *Waste management*, *29*(8), 2227-2239. (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERL70: Evidence of introduction of (financial) incentive schemes for households and businesses to engage in a more energy efficient behaviour

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERL70: Evidence of introduction of (financial) incentive schemes for households and businesses to engage in a more energy efficient behaviour***
Indicator level	Outcome
Purpose of indicator	Household energy conservation has emerged as a major challenge and opportunity for practitioners and policymakers. Consumers also seem to be gaining greater awareness of the value and need for sustainable energy practices, particularly amid growing public concerns over greenhouse gas emissions and climate change. Yet even with adequate knowledge of how to save energy and a professed desire to do so, many consumers still fail to take noticeable steps towards energy efficiency and conservation. An incentive scheme therefore rewards people who engage in more energy efficient behaviour, giving them either a community or an individual reward with the aim of motivating people to take action.
What the indicator measures	The indicator should ascertain any kind of evidence of (financial) incentive schemes for households and businesses to engage in a more energy efficient behaviour which was supported by a project.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Observation
Definition of key terms	**(Financial) incentives for energy efficiency** are an important instrument for spurring investment in energy efficient technologies and services. The incorporation of a financial incentive can make energy efficiency investments more alluring for private and public entities, particularly by lowering inhibitive upfront costs. Financial incentives can take many forms: rebates, grants or loans for energy-efficiency improvements, direct income tax deductions for individuals and businesses, and exemptions or reduced sales tax on eligible products.
Further resources	Barbu, A. D., Griffiths, N., & Morton, G. (2013). Achieving energy efficiency through behaviour change: what does it take. (link)

EERL71: Evidence of changed behaviour patterns of local inhabitants in relation to energy use

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERL71: Evidence of changed behaviour patterns of local inhabitants in relation to energy use***
Indicator level	Outcome
Purpose of indicator	Behavioral change is becoming an important research object in order to reduce energy consumption. More and more programs and projects for environmental behavior research are made, that provides innovative tools and methods. People's behavior in relation to energy consumption affects the number of macro-level and personal factors. Macro-level factors include technological progress, economic development level, demographic, institutional and cultural country factors, while personal factors include personal human qualities, attitudes, beliefs, norms, motivation, skills, knowledge, habits and routines. The purpose of indicator is to identify any behaviour change; positive or negative, related to energy use in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in relation to the energy use affected by project intervention.
Data sources	Project and institutional records and documentation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour. **Behaviour pattern** is the characteristic ways in which a person or animal acts.
Further resources	Barbu, A. D., Griffiths, N., & Morton, G. (2013). Achieving energy efficiency through behaviour change: what does it take. (link) Ferrara, I., & Serret, Y. (2008). Household Behaviour and the Environment, Reviewing the Evidence. (link)

EERL72: Evidence of introduction of (financial) incentive schemes to enhance production and use of renewable energy

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERL72: Evidence of introduction of (financial) incentive schemes to enhance production and use of renewable energy***
Indicator level	Outcome
Purpose of indicator	Our reliance upon fossil fuels such as coal and oil is negatively affecting the planet. Burning these fossil fuels increases the amount of carbon dioxide (CO2) that is released into the atmosphere, leading to a heightened greenhouse effect and warming of the earth. With governments trying to reduce CO2 emissions, renewable sources of energy (such as those derived from wind, the sun and waves) are presenting themselves as viable, eco-friendly options to meet the world's energy needs. An incentive scheme should reward people, industries and other facilities who engage in use of renewable energy or its production, giving them reward (lower taxes, grants etc.) with the aim of changing the behaviour to more ecological and sustainable one.
What the indicator measures	Any kind of evidence of introduction of financial or other incentives schemes to enhance production and use of renewable energy
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Renewable sources of energy** are sources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services. **(Financial) incentives for renewable energy use** are an important instruments for spurring investment in production and use of renewable energy through efficient technologies and services. The incorporation of a financial incentive can make investments more alluring for private and public entities, particularly by lowering inhibitive upfront costs. Financial incentives can take many forms: rebates, grants or loans for energy-efficiency improvements, direct income tax deductions for individuals and businesses, and exemptions or reduced sales tax on eligible products.
Further resources	Stefani, S., Bonacina, F., Rota, A., & Caridi, A. (2013). Incentives for renewable energy. Working Papers, 239. Beck, F., & Martinot, E. (2004). Renewable energy policies and barriers. (link).

EERL73: Change in energy use patterns in project-affected communities / facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERL73: Change in energy use patterns in project-affected communities / facilities***
Indicator level	Outcome
Purpose of indicator	Behavioral change is becoming an important research object in order to reduce energy consumption and energy use. More and more programs and projects for environmental behavior research are made, that provides innovative tools and methods. Not only people's behavior in relation to energy consumption but also structural change and change in industrial, commercial and transportation industries is necessary. The purpose of indicator is to identify any behaviour change; positive or negative, related to energy use in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	The indicator measures any kind of evidence in energy use patterns in the whole project targeted areas/facilities (including industrial or municipal energy use).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Behaviour pattern** is the characteristic ways in which a person, group or animal acts.
Further resources	Barbu, A. D., Griffiths, N., & Morton, G. (2013). Achieving energy efficiency through behaviour change: what does it take. European Environment Agency (EEA), Copenhagen. (link) Ferrara, I., & Serret, Y. (2008). Household Behaviour and the Environment, Reviewing the Evidence. Organization for Economic Cooperation and Development: Paris, France, 153-180. (link)

EGRL1: Evidence of increased capacity of local authorities to effectively and efficiently govern over natural resources and their use

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL1: Evidence of increased capacity of local authorities to effectively and efficiently govern over natural resources and their use***
Indicator level	Outcome
Purpose of indicator	The quality of local governance is primarily linked to the political willingness of central governments to create a conducive environment at local level, through legal and regulatory instruments, allowing local authorities to benefit from a sufficient level of autonomy in exercising power and acquire specific capabilities. Assistance to local authorities should aim at enhancing their capacities and means to execute their institutional mandate, so they could efficiently and effectively govern over natural resources and their use.
What the indicator measures	This indicator should ascertain any kind of evidence of increased capacity of local authorities to effectively and efficiently govern over natural resources and their use.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Capacity:** Ability to effectively design, plan, carry out, and monitor and evaluate the organization's core functions and scope of work. Local Authorities» will refer to public institutions with legal personality, component of the State structure, below the level of central government and accountable to citizens. **Local Authorities** are usually composed of a deliberative or policy-making body (council or assembly) and an executive body (the Mayor or other executive officer), directly or indirectly elected or selected at local level. The term encompasses different tiers of government, e.g. villages, municipalities, districts, counties, provinces, regions, etc. Within this wide context, the focus of this Communication is however put on the municipal level, which is generally the lowest government tier of the public institutional system and the closest to citizens.
Further resources	European Commission (2013). Empowering Local Authorities in partner countries for enhanced governance and more effective development outcomes. (link)

EGRL2: Satisfaction of community members/target groups with environmental protection

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL2: Satisfaction of community members/target groups with environmental protection***
Indicator level	Outcome
Purpose of indicator	An improvement in quality of life is the main aim of sustainable development and is evaluated by applying various factors and indicators. The environmental dimension is one of the major influences on quality of life. Indicators of satisfaction with environmental protection are of a subjective matter; however they become an important instrument to capture an important dimension of well-being that is missed by objective measures. Self-reporting also shows the importance people place on having a voice.
What the indicator measures	This indicator should capture the level of satisfaction of community members/target groups with environmental protection which is being implemented at the targeted area.
Data sources	Stakeholders
Methods of data collection	Desk research Survey Interviews Focus groups Participatory techniques (most significant change, storytelling etc.) Case studies
Definition of key terms	**Environmental protection** is a practice of protecting the natural environment on individual, organisation controlled or governmental levels, for the benefit of both the environment and humans.
Further resources	Streimikiene, D. (2015). Environmental indicators for the assessment of quality of life. Intellectual Economics, 9(1), 67-79. (link)

EGRL3: Degree of uptake and type of environmentally-focused financial incentives

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL3: Degree of uptake and type of environmentally-focused financial incentives***
Indicator level	Outcome
Purpose of indicator	The use of incentives to encourage social change behaviors has received a good deal of attention in past years, primarily from a conservation perspective. Financial incentives are typically divided into positive (subsidies and tax reductions) and negative types (e.g. fines). The aim of an incentive scheme is to reward people, industries and other facilities who engage in environmentally friendly behaviour, giving them reward (lower taxes, grants etc.) with the aim of changing the behaviour to more ecological and sustainable one.
What the indicator measures	The indicator measures the extent to which the project contributed to the uptake/set of environmentally –focus financial incentives and describes the type.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Financial incentive** is a monetary benefit offered to consumers, employees, organizations and facilities to encourage behaviour or actions which otherwise would not take place. A financial incentive motivates actions which otherwise might not occur without the monetary benefit.
Further resources	Mason, W., & Watts, D. J. (2010). Financial incentives and the performance of crowds. (link) Nichols, A. L. (1984). Targeting economic incentives for environmental protection.

EGRL4: Evidence of new laws, bylaws, policies, regulations or strategies in the area of safe manipulation and disposing of potentially hazardous waste

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL4: Evidence of new laws, bylaws, policies, regulations or strategies in the area of safe manipulation and disposing of potentially hazardous waste***
Indicator level	Outcome
Purpose of indicator	Hazardous waste that is improperly managed poses a serious threat to human health and the environment. The management of hazardous wastes has manifested itself in the form of two questions: how to prevent environmental deterioration caused by the generation of hazardous wastes, and how to effectively clean up the problems caused by past examples of improper disposal. To develop regulations for hazardous waste management is important to provide adequate protection of human health and the environment while at the same time: fostering environmentally sound recycling and conservation of resources, making the rules easier to understand, facilitating better compliance, or providing flexibility in how certain hazardous waste is managed.
What the indicator measures	This indicator should ascertain any kind of evidence of creation of new laws, bylaws, policies, regulations or strategies in the area of safe manipulation and disposing of potentially hazardous waste which have been set with a support of project
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research Observation
Definition of key terms	**Hazardous wastes** means wastes (liquids, solids, contained gases, or sludge) other than radioactive wastes which, by reason of their chemical activity or toxic, explosive, corrosive, or other characteristics, cause danger or likely will cause danger to health or the environment, whether alone or when coming into contact with other waste.
Further resources	LaGrega, M. D., Buckingham, P. L., & Evans, J. C. (2010). Hazardous waste management. Waveland Press. (link)

EGRL5: Evidence of effective enforcement of environmental rules, regulations and policies

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL5: Evidence of effective enforcement of environmental rules, regulations and policies***
Indicator level	Outcome
Purpose of indicator	The effective enforcement of environmental laws and regulations is crucial for proper environmental management. Governments enact environmental laws and set environmental standards to protect the environment. Yet the mere existence of laws is rarely sufficient to ensure their success. The inspection and enforcement components of environmental laws and regulations are therefore essential for ensuring implementation of standards and protection of the environment.
What the indicator measures	This indicator should ascertain any kind of evidence of effective enforcement of environmental rules, regulations and policies which were implemented directly or indirectly by the project
Data sources	Project and institutional records and documentation Regional and national reports/legislation Regulations adopted or enacted in the area of the intervention Police records Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Policy**: Policy is a set of rules and procedures that ensure legal representation of the interests of citizens through representative democracy. It lays out the vision, goals, and objectives for leadership and governance. Policies may include decisions, guidelines, legislations, and regulations. The main policy actors are political parties and politicians, elected members of the Parliament and local government.
Further resources	Salzman, J., & Thompson, B. H. (2003). Environmental law and policy. New York: Foundation Press. (link)

EGRL6: Evidence of positive effect/impact of new measures on the state of environment

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL6: Evidence of positive effect/impact of new measures on the state of environment***
Indicator level	Outcome
Purpose of indicator	Any measure aimed at environmental improvement must be focused on certain part of the environmental issue, e.g. climate change, soil erosion, waste management and many more. The evidence of the positive impact is then derived from the type of the measure introduced; possibility, that some more general indicator, including larger part of the environment, is rare, but not non-existent. These general indicators usually measure increase or decrease of the biodiversity, health improvement or sustainability; their strength depends on scale of the data collection and statistical methods used to determinate them.
What the indicator measures	This indicator should try to ascertain any kind of evidence of positive effect of new measures on the state environment which was caused directly or indirectly by the project (rules, regulations policies etc.), if possible to measure
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Environmen**t is all surroundings of a living organism, including natural forces and other living things, which provide conditions for development and growth as well as of danger and damage.
Further resources	Salzman, J., & Thompson, B. H. (2003). Environmental law and policy. New York: Foundation Press. (link)

EGRL7: Evidence of civil society participation in environmental governance

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL7: Evidence of civil society participation in environmental governance***
Indicator level	Outcome
Purpose of indicator	Enabling the constructive participation of civil society in environmental governance is one of the most important tasks for policymakers. The roles that civil society might play in global environmental governance are: collecting, disseminating, and analysing information; providing input to agenda-setting and policy development processes; performing operational functions; assessing environmental conditions and monitoring compliance with environmental agreements; and advocating environmental justice.
What the indicator measures	This indicator should ascertain any kind of evidence of civil society participating in environmental governance
Data sources	Project and institutional records and documentation Stakeholders Civil society groups
Methods of data collection	Focus group discussions Surveys Interviews Desk research Most significant change, story telling
Definition of key terms	**Civil society**: In the broadest sense, civil society has been characterized as a sphere of social life that is public but excludes government activities. The term civil society is generally used to classify persons, institutions, and organizations that have the goal of advancing or expressing a common purpose through ideas, actions, and demands on governments. **Civil society organization**: Civil society organizations are broadly understood as the diverse groups, NGOs and not-for-profit organizations that have a presence in public life and express the interests and values of their members or others, based on ethical, cultural, political, scientific, religious, or philanthropic considerations. **Environmental governance** as the means by which society determines and acts on goals and priorities related to the management of natural resources. This includes the rules, both formal and informal, that govern human behaviour in decision-making processes as well as the decisions themselves. Appropriate legal frameworks on the global, regional, national and local level are a prerequisite for good environmental governance
Further resources	Džatková, V. (2016). The Role of Civil Society in Public Governance. Rocznik Administracji Publicznej 2. (link) Reid, H. et al. (2012). Southern voices on climate policy choices. Analysis of and lessons learned from civil society advocacy on climate change. (link)

EGRL8: Evidence of changes in citizens' more environmentally-friendly behaviour

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL8: Evidence of changes in citizens' more environmentally-friendly behaviour***
Indicator level	Outcome
Purpose of indicator	Environmental quality strongly depends on human behaviour patterns. The promotion of environmentally friendly behaviour is one of the ways to minimise the environmental impact. The purpose of indicator is to identify a behaviour change; positive or negative, related to more environmentally friendly behaviour in order to classify the current level of behaviour (negative, passive, proactive) and to evaluate the mechanisms for changing practices (education, consultation and policy evolution).
What the indicator measures	Any kind of evidence of change behaviour patterns of targeted population in acting more environmentally friendly compared to baseline (situation prior intervention)
Data sources	Stakeholders Project and institutional records and documentation
Methods of data collection	Focus group discussions Surveys Interviews Desk research Most significant change, story telling Case studies
Definition of key terms	**Behaviour change** refers to any transformation or modification of human behaviour. **Behaviour pattern** is the characteristic ways in which a person or animal acts.
Further resources	Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. (link)

EGRL9: Evidence of change in media reflections of environmental topics.

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRL9: Evidence of change in media reflections of environmental topics.***
Indicator level	Outcome
Purpose of indicator	Attempts have been made to inform and sensitize people and governments about the environmental pollution. The core idea of these attempts was, and still is, that the more people are aware of the environmental problems and the correlated health risks, the more their motivation to overturn the situation and act with caution towards the environment, reduce their ecological footprint and adopt green technologies. The media, and especially the digital ones, can and should contribute towards this direction. Via the media people have most of their knowledge regarding the environment. The power of media lays on the fact that they are widespread and shape, or even wield, public opinion.
What the indicator measures	This indicator should ascertain any kind of evidence of change in media reflections of environmental topics which was caused directly or indirectly by the project compared to baseline (the situation prior to the intervention). To the extent possible, the number or type of media should also be analyzed.
Data sources	Project and institutional records and documentation Local media Relevant stakeholders
Methods of data collection	Desk research Media tracking, media content analysis Focus group discussions Surveys Interviews
Definition of key terms	The term **media** most commonly refer to newspapers, news agencies, television, radio, internet and graphic publications.
Further resources	Sypsas, A., Mallidis, N. T., Dromantiene, L., & Pange, J. (2013). The role of the media in the enhancement of environmental awareness. (link)

3. ENVIRONMENTAL SUSTAINABILITY OUTCOME INDICATORS – B.2 (QUAN.)

EERN1: Long-term increase/decrease in forested areas as a direct or indirect consequence of a project.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN1: Long-term increase/decrease in forested areas as a direct or indirect consequence of a project.***
Indicator level	Outcome
Purpose of indicator	The loss of forest area or its growth could mean many things and it depends on context in which that happens. In rich, well-functioning countries is the ratio of forested area usually stable and doesn´t experience any dramatically changes, as the historical forest bits of the landscape are preserved by law continuously. In these countries, the increase of forested land could mean forestation of cultural landscape, which usually means loss of structural diversity and could be considered as a negative indicator. However, in countries, where the law enforcement and state control is poor or corrupted, the loss of forest area usually indicate landscape continuous destruction, and any decrease in the speed of deforestation should be taken positively.
What the indicator measures	The indicator measures increase or decrease in forested areas as a direct or indirect consequent of a project compared to the baseline (situation prior the intervention). It can be expressed in the absolute terms or as ratio.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey Observation
Definition of key terms	**Afforestation** is the establishment of a forest or stand of trees in an area where there was no previous tree cover. **Deforestation** is the permanent destruction of forests in order to make the land available for other uses. The most common reasons are: housing, urbanization, commercial items, fuel, oil, room for cattle ranching, etc.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. (link). Morrison-Métois, S. & Lundgren, H. Forests and sustainable forest management. Evaluation evidence in addressing deforestation to reduce CO2 emissions. (link).

EERN2: Percentage of policy-makers, farmers and other stakeholders who take environmental aspects into consideration in their daily activities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN2: Percentage of policy-makers, farmers and other stakeholders who take environmental aspects into consideration in their daily activities***
Indicator level	Outcome
Purpose of indicator	To consider environmental aspects in daily activities of every person (policy-makers in particularly) is one of the key elements for further sustainable development. This is particularly challenging because of the need to reconcile global objectives and international rules with domestic needs and laws. The environmental issues which should be considered include(but are not limited to) air and water pollution, waste management, ecosystem management, biodiversity protection, the protection of natural resources, wildlife and endangered species, preservation of these natural resources etc.
What the indicator measures	Percentage of policy-makers, farmers and other stakeholders who take environmental aspects into consideration in their daily activities compared to baseline (situation prior to intervention)
Data sources	Stakeholders including beneficiaries
Methods of data collection	Focus group discussions Surveys Interviews
Definition of key terms	**Policy maker** is a person responsible for or involved in formulating policies, especially in politics
Further resources	Lafferty, W., & Hovden, E. (2003). Environmental policy integration: towards an analytical framework. (link)

EERN3: Number and type of measures aimed at decreasing use of forest resources and deforestation.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN3: Number and type of measures aimed at decreasing use of forest resources and deforestation.***
Indicator level	Outcome
Purpose of indicator	In many countries, the forests are often used as instant, quick resources of farming land. The easiest way to clear them is burning; after the soil depletion, the land is often abandoned and exposed to erosion, ending as a wasteland. In easier form, over logging can lead to permanent soil nutrient deprivation, ending in highly decreased soil and ecosystem productivity. All these negative processes usually cause or speed up local climate change and growing predisposition to sudden environmental shifts, which may have highly destructive effects. Hence, extensive set of measures and effective control is necessary to prevent this.
What the indicator measures	The number and type of measures aimed at decreasing use of forest resources and deforestation implemented with the project financial or other support.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Deforestation** is the permanent destruction of forests in order to make the land available for other uses. The most common reasons are: housing, urbanization, commercial items, fuel, oil, room for cattle ranching, etc.
Further resources	Garrity, D. P. (2004). Agroforestry and the achievement of the Millennium Development Goals. (link) Morrison-Métois, S. & Lundgren, H. (2016). Forests and sustainable forest management. Evaluation evidence in addressing deforestation to reduce CO2 emissions. (link)

EERN4: Change in species diversity in project area after the intervention

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN4: Change in species diversity in project area after the intervention***
Indicator level	Outcome
Purpose of indicator	Species richness is only one of the biodiversity aspects (the other ones refer to structural and spatiotemporal distribution at larger scale), but can be often one of the easiest indicators to measure, as - in the simplest form – only a species list is required. In any case, a verifiable proof is needed to link the change with project influence, as the species diversity fluctuate naturally in most ecosystems; such a proof is usually supported by a detailed monitoring during the project´s run. A precaution also should be taken when judging the proven changes, as a decrease of the species diversity could be effect of natural succession and – oppositely – some cases of increase are often caused by artificial introduction and/or invasion of certain species, or have only temporal/ephemeral nature.
What the indicator measures	The decrease or increase in species diversity in project area after the intervention. It is compared to baseline (situation prior the intervention).
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey Observation
Definition of key terms	**Species diversity** is the number of different species that are represented in a given community (a dataset). Species diversity consists of two components: species richness and species evenness. Species richness is a simple count of species, whereas species evenness quantifies how equal the abundances of the species are. **Indicator species** is any biological species that defines a trait or characteristic of the environment.
Further resources	Breckhei Breckheimer et all. (2014). Defining and evaluating the umbrella species concept for conserving and restoring landscape connectivity. Conservation biology, 28(6), 1584-1593. Roberg, J.M. & Angelstramu, P. (2004). Usefulness of the Umbrella Species Concept as a Conservation Tool. (link)

EERN5: Improved quality of soil in area of project intervention as per local or international standards

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN5: Improved quality of soil in area of project intervention as per local or international standards***
Indicator level	Outcome
Purpose of indicator	The soil is responsible for many vital functions of the vivid landscape, like decomposition of the organic matter, plant nutrition, mycorrhizal and other symbioses, water retention, binds toxic compounds and heavy metals and many others. Damaged "health" of the soil causes erosion enhancement, plant malnutrition, water toxicities and in extreme, but not unusual cases local ecological disasters and/or famine. Soil quality is one of the most important environmental indicators, as the diversity of soil life strongly depends on quality of the environment. Any negative or positive change in the land-use changes the soil life parameters as well as the chemical and structural features.
What the indicator measures	The indicator tracks improvements in soil quality in areas of the project interventions. The improvements are compared to baseline (situation prior to intervention). However, to prove improved soil quality in any larger area a long-term, extensive monitoring is necessary together with advanced laboratory equipment.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Own measurements Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey Observation Field soil sample collections
Definition of key terms	**Soil quality** is the capacity of a specific kind of soil to function, within natural or managed ecosystem boundaries, to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation.
Further resources	Karlen, D. L. et al. (1997). Soil quality: a concept, definition, and framework for evaluation (a guest editorial). (link) Karlen, D. L., Andrews, S. S., & Doran, J. W. (2001). Soil quality: current concepts and applications. Advances in agronomy, 74, 1-40.

EERN6: Expansion of agricultural land at the expense of specially protected areas as a direct or indirect result of a project.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN6: Expansion of agricultural land at the expense of specially protected areas as a direct or indirect result of a project.***
Indicator level	Outcome
Purpose of indicator	Change of the land use is always matter of interpretation strongly depending on current context and landscape history of particular area. Sometimes it could mean switch from one type to agricultural land use to another, and some forms of "special protection" do not automatically bring benefits for particular landscape, so the switch to "agricultural land" does not mean certain loss. However, in cases like rapid deforestation in dysfunctional, corrupted or collapsed societies, when the status of protected areas is universally ignored, this means almost always a loss and such a project result, both direct and indirect, should be considered as a negative indicator.
What the indicator measures	The indicator measures whether the agricultural land has had expanded at the expense of specially protected areas as a direct or indirect result of a project. The must is to know the situation before the intervention. The indicator can be expressed in absolute terms or as a ratio (before and after intervention).
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Agricultural land** is typically land devoted to agriculture, the systematic and controlled use of other forms of life—particularly the rearing of livestock and production of crops. **Specially protected area** is one of the most important instruments in nature and landscape protection. Such sites are typically places of unique or representative biological diversity at the species, population or society levels as well as sites of unique geological composition, sites representing typical elements of the landscape character of cultivated landscape, and sites significant with respect to scientific research.
Further resources	Foley, J. A. et al. (2005). Global consequences of land use. (link)

EERN7: Change in soil erosion rates

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN7: Change in soil erosion rates***
Indicator level	Outcome
Purpose of indicator	Soil erosion is one of the most urgent environmental and economical threats worldwide. It is caused by a great number of factors like deforestation, insensitive agriculture, loss of landscape heterogeneity, soil chemical pollution, climate change and many more. Other dangerous factors and effects are often associated, as floods, droughts and even famine. However, any project aiming soil protection, landscape structure improvement or supporting biological agriculture and other proven measures has a great positive influence. Also, the erosion rates are relatively simple to measure and almost any positive practical step has immediate positive and measurable effect.
What the indicator measures	The indicator measures the amount of soil loss in kg/ton per ha per months/year compared to baseline (situation prior to intervention)in project related area. In case of lacking data use predicted estimates.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Regional and national statistics Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Soil erosion** is the displacement of upper layer of soil, one form of soil degradation. The erosion of soil is a naturally occurring process on all land. The agents of soil erosion are water and wind, each contributing a significant amount of soil loss each year. Soil erosion may be a slow process that continues relatively unnoticed, or it may occur at an alarming rate causing a serious loss of topsoil.
Further resources	Morgan, R. P. C. (2009). Soil erosion and conservation. John Wiley & Sons. (link).

EERN8: Number of persons acting as citizen scientists after project end.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.1 Biodiversity, land, soils and forests
Indicator name	***EERN8: Number of persons acting as citizen scientists after project end***
Indicator level	Outcome
Purpose of indicator	Citizen science covers a suite of innovative tools to engage with the public to apply their curiosity and contribute their talents to science and technology. Citizen scientists can provide information that would not otherwise be available due to time, geographic, or resource constraints. Citizen science mobilizes the public to participate in the scientific process to address problems. This can include identifying research questions, collecting and analyzing data, making new discoveries, and developing technologies and applications. Citizen scientist can focus on ecological monitoring, environmental training and education as well and spread the knowledge of sustainable environmental behaviour.
What the indicator measures	The indicator tracks the number of people who became/act as citizen scientists after project end
Data sources	Stakeholders Project documents and records Presentation lists
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Citizen Scientists** is a member of the general public who engages in scientific work, often in collaboration with or under the direction of professional scientists that focuses on ecological monitoring, environmental training and education.
Further resources	Bonney, R. et al. (2009). Citizen science: a developing tool for expanding science knowledge and scientific literacy. (link) Irwin, A. (1995). Citizen science: A study of people, expertise and sustainable development. Psychology Press. (link) Silvertown, J. (2009). A new dawn for citizen science. (link)

EERN20: Levels of air pollutants in the intervention area

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN20: Levels of air pollutants in the intervention area***
Indicator level	Outcome
Purpose of indicator	Air pollutants have negative impact on human health and environment. They can influence the environment via direct or indirect, long term effects, depending on type of the pollution. Solid particles influence more human health and have usually bleak effect on the environment (except the extremely high values), whereas chemically active substances like dioxins, sulphur compounds or CO have direct negative effect on both. Some synthetic substances accumulate in ecosystems and their negative effect emerges after reaching the border values.
What the indicator measures	The indicator measures the level of air pollutants in intervention area compared to baseline (situation prior to intervention). The amount is expressed in tonnes a year. The type of pollutant monitored needs to be defined within each project.
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Regional and national statistics Municipalities Stakeholders National data inventories Own measurements
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Air pollution** is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulphur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases, which can be fatal. **Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases. The most common are sulphur oxides (SOx), nitrogen oxides (NOx), ammonia (NH3), non-methane volatile organic compounds (NMVOC) and fine particulate matter (PM2.5) greenhouse gas emissions.
Further resources	Schwela, D. (2000). Air pollution and health in urban areas. Reviews on environmental health, 15(1-2), 13-42. Veetil, S.P. (2012). Air Pollution: Sources and Effects in Urban Areas and How it Affect the Investment and Economy. (link)

EERN21: Ambient concentrations of air pollutants in urban areas

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN21: Ambient concentrations of air pollutants in urban areas***
Indicator level	Outcome
Purpose of indicator	Urban areas are the mostly affected by air pollutions for many reasons: concentration of most of industry and traffic and distinct features of the urban terrain obstruct the ventilation capabilities, present in the majority of the open landscape. Furthermore, more threats like ground-level ozone and dust as a direct product of the interaction between the warmer city climate, UV – radiation and high concentration of human activities makes it even worse. Urban air pollutants are eradicable by environmentally friendly traffic and industry using renewable energy resources and "intelligent urban planning", and the effort of any project should be evaluated by a wide scale of indicators, measuring both long- and short- term decrease in air pollutant levels.
What the indicator measures	The indicator measures the concentration of air pollutants in urban areas compared to baseline (situation prior to intervention). The amount is expressed in tonnes a year and is compared to baseline (situation prior the intervention). The type of pollutant monitored needs to be defined within each project.
Data sources	Project documents and records Stakeholders National data inventories Own measurements
Methods of data collection	Desk research Focus group discussions Surveys Interviews
Definition of key terms	**Air pollution** is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. **Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases. The most common are sulphur oxides (SOx), nitrogen oxides (NOx), ammonia (NH3), non-methane volatile organic compounds (NMVOC) and fine particulate matter (PM2.5) greenhouse gas emissions.
Further resources	Schwela, D. (2000). Air pollution and health in urban areas. Reviews on environmental health, 15(1-2), 13-42. Veetil, S.P. (2012). Air Pollution: Sources and Effects in Urban Areas and How it Affect the Investment and Economy. (link)

EERN22: Total and proportion of greenhouse gas emissions from the transportation sector

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN22: Total and proportion of greenhouse gas emissions from the transportation sector***
Indicator level	Outcome
Purpose of indicator	Transportation produces a significant part of the global greenhouse gas emissions; it has extensive immediate effect mainly in urbanized areas and is a cause of environmental damage as well as human health damage worldwide. The two levels of this variable have different meaning: total proportion could be used locally as a measure of (un)improvement of the local conditions, whereas the proportion gives more global comparison to the other pollution resources and should be used when measuring the global context.
What the indicator measures	The indicator measures greenhouse gas emissions from the transportation sector in absolute terms (tonnes a year) and percentage compared to baseline (situation prior to intervention).
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Regional and national statistics National data inventories Stakeholders
Methods of data collection	Desk research Surveys Interviews
Definition of key terms	**Greenhouse gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Further resources	Enkvist, P., Nauclér, T., & Rosander, J. (2007). A cost curve for greenhouse gas reduction. McKinsey Quarterly, 1, 34. (link)

EERN23: Total and proportion of greenhouse gas emissions from the agricultural sector

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN23: Total and proportion of greenhouse gas emissions from the agricultural sector***
Indicator level	Outcome
Purpose of indicator	Agriculture contributes to approximately one quarter of the greenhouse gas emissions worldwide; not only via the carbon dioxide produced by agricultural machinery, but - mainly – via livestock breeding and soil fertilisation. The levels of greenhouse gas production are not dependent on the level of the country´s economic maturity; even highly developed states are great producers. Total proportion is an indicator better applicable at the local level: different environments have different carbon storage capacities, whereas the proportion is better applicable at more global level, telling about the pattern and past/future development of greenhouse gas production.
What the indicator measures	The indicator measures greenhouse gas emissions from the agricultural sector in absolute terms (tonnes a year) and percentage compared to baseline (situation prior to intervention).
Data sources	Project records and documentation Relevant institutions' (e.g. environmental) records Regional and national statistics Stakeholders National data inventories
Methods of data collection	Desk research Surveys Interviews
Definition of key terms	**Greenhouse gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Further resources	Burney, J. A., Davis, S. J., & Lobell, D. B. (2010). Greenhouse gas mitigation by agricultural intensification. (link) Smith, P. et al. (2008). Greenhouse gas mitigation in agriculture. (link)

EERN24: Total and proportion of greenhouse gas emissions from households

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN24: Total and proportion of greenhouse gas emissions from households***
Indicator level	Outcome
Purpose of indicator	Households are significant source of greenhouse gas emissions: they produce around one fifth worldwide. However, past development is slightly positive and the ratio of the households' greenhouse gas production is every year slightly lower. This is a result of installing better technologies, using renewable energy or availability of better thermic insulation. Total amount is an indicator better applicable at the local level: different environments have different carbon storage capacities, whereas the proportion is better applicable at more global level, telling about the pattern and past/future development of households' greenhouse gas production.
What the indicator measures	The indicator measures greenhouse gas emissions from households in absolute terms (tonnes a year) and percentage compared to baseline (situation prior to intervention). The greenhouse gas emissions vary among individuals depending on a person's location, habits, and personal choices. The possible measurement of households is through carbon foot print calculator. However, for the purpose of evaluation it is may be better to consider just estimates of amount of emissions from households on the base of used technologies, environment etc.
Data sources	Project documents and records Stakeholders National data inventories Own measurements
Methods of data collection	Desk research Surveys Interviews Field work
Definition of key terms	**Greenhouse gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Further resources	Wilkinson, P. et al. (2009). Public health benefits of strategies to reduce greenhouse-gas emissions: household energy. (link)

EERN25: Total and proportion of greenhouse gas emissions from any or all supported sector(s)

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN25: Total and proportion of greenhouse gas emissions from any or all supported sector(s)***
Indicator level	Outcome
Purpose of indicator	A number of the sectors supported through development cooperation represent significant sources of greenhouse gas emissions. Considering the current global agenda concerning climate change and global warming, reduction of GHG emissions should be a priority in all targeted sectors. This can be achieved by installing better technologies, using renewable energy or availability of better thermic insulation of buildings. Total amount is an indicator better applicable at the local level: different environments have different carbon storage capacities, whereas the proportion is better applicable at more global level, telling about the pattern and past/future development of households' greenhouse gas production.
What the indicator measures	The indicator measures greenhouse gas emissions from units in supported sector(s) or supported sector(s) as a whole in absolute terms (tonnes a year) and percentage compared to baseline (situation prior to intervention). The greenhouse gas emissions vary among and within sectors, industries and individual units comprised within them. The possible measurement is through carbon foot print calculator. However, for the purpose of evaluation it is may be better to consider just estimates of amount of emissions from households on the base of used technologies, environment etc.
Data sources	Project documents and records Stakeholders National data inventories Own measurements
Methods of data collection	Desk research Surveys Interviews Field work
Definition of key terms	**Greenhouse gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Further resources	International Council of chemical Associations. (2015). *Principles for Global Policies to Reduce Greenhouse Gas Emissions. The Chemical Industry and Climate Change*. (link) Korbera, E. et al. (2010). Reducing greenhouse gas emissions from deforestation and forest degradation in developing countries: revisiting the assumptions. *Climatic Change 100*, 355–388. (link) Williams, J. H. (2013). *The Technology Path to Deep Greenhouse Gas Emissions Cuts by 2050: The Pivotal Role of Electricity*. (link)

EERN26: Emissions of air pollutants from project-supported products or facilities

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN26: Emissions of air pollutants from project-supported products or facilities***
Indicator level	Outcome
Purpose of indicator	Air pollutants differ in major groups/types, causing different kind of damage and having different level of seriousness. Always, no air pollution is better than even a slight one; any project producing any amount of air pollutants should put an effort to reduce it. Some greenhouse gases like carbon dioxide, or solid particles, can be reduced relatively easily, whereas technologies reducing carcinogenic substances present in very low concentrations like dioxins, are very complicated and expensive.
What the indicator measures	The indicator measures the amount of air pollutants produced by products or facilities supported by a project. The amount is expressed in tonnes a year or in percentage compared to baseline (situation prior the intervention). The type of pollutant monitored needs to be defined within each project. Without specific measurements of selected air pollutants before and after the intervention, it is difficult to assume if the product or facilities have a direct effect on air pollution.
Data sources	Project documents and records Stakeholders National data inventories Own measurements
Methods of data collection	Desk research Focus group discussions Surveys Interviews
Definition of key terms	**Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases.The most common are sulphur oxides (SOx), nitrogen oxides (NOx), ammonia (NH3), non-methane volatile organic compounds (NMVOC) and fine particulate matter (PM2.5) greenhouse gas emissions.
Further resources	EMEP/EEA air pollutant emission inventory guidebook - 2016 (link)

EERN27: Emissions of air pollutants from disposal and treatment of waste generated by project-supported products or facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN27: Emissions of air pollutants from disposal and treatment of waste generated by project-supported products or facilities***
Indicator level	Outcome
Purpose of indicator	Treatment and disposal of waste can cause air pollution. Air pollution consists of gaseous, liquid, or solid substances that, when present in sufficient concentration, for a sufficient time, and under certain conditions, tend to interfere with human comfort, health or welfare, and cause environmental damage. There are peculiar challenges in estimating and accounting for emissions of air pollutants from waste and resource management. Measurements can be taken over a short time period (e.g., hours), often referred to as a source test, or with methods that measure on a continuous basis, often called continuous emissions monitoring. Either way, it is important obtain data from samples that are representative of the emission stream using methods that are reliable. To figure out whether the project had an influence on decrease or increase of air pollutants is very difficult and will probably require long term measurement throughout the project implementation.
What the indicator measures	The indicator compares the amount of emissions of air pollutants from disposal and treatment of waste at the beginning of the intervention and at the time of evaluation.
Data sources	Own measurements/field work Project and institutional reports and documentation Stakeholders
Methods of data collection	Measurement Desk research Survey Interviews
Definition of key terms	**Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases. Air pollutants fall into two main groups: (1) those emitted from identifiable sources and, (2) those formed in the air by interaction between other pollutants. Over one hundred air pollutants have been identified, which include halogen compounds, nitrogen compounds, oxygen compounds, radioactive compounds, sulphur (sulfur) compounds, and volatile organic chemicals (VOC). **Greenhouse gas** is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Further resources	Hamoda, M. F. (2006). Air pollutants emissions from waste treatment and disposal facilities. (link)

EERN28: Emissions of air pollutants from energy-producing plants and processes

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERN28: Emissions of air pollutants from energy-producing plants and processes***
Indicator level	Outcome
Purpose of indicator	Energy generation is the number one cause of air pollution and the leading cause of global warming emissions. The generation of electric power produces more pollution. Coal produces more pollution than any other energy source followed by natural gas and oil. Fossil fuels constitute a significant repository of carbon buried deep underground. Burning those results in the conversion of this carbon to carbon dioxide, this is then released into the atmosphere. Depending on the particular fossil fuel and the method of burning, other emissions may be produced as well. Ozone, sulfur dioxide, NO2 and other gases.
What the indicator measures	The indicator compares the amount of emissions of air pollutants from energy- producing plants and processes at the beginning of the intervention and at the time of evaluation.
Data sources	Own measurements/field work Project and institutional reports and documentation Stakeholders
Methods of data collection	Desk research Interviews Survey Measurement
Definition of key terms	**Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases. Air pollutants fall into two main groups: (1) those emitted from identifiable sources and, (2) those formed in the air by interaction between other pollutants. Over one hundred air pollutants have been identified, which include halogen compounds, nitrogen compounds, oxygen compounds, radioactive compounds, sulphur (sulfur) compounds, and volatile organic chemicals (VOC).
Further resources	Jacobson, M. Z. (2009). Review of solutions to global warming, air pollution, and energy security. Energy & Environmental Science, 2(2), 148-173 (link).

EERN29: CO2 sequestration capacity

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	1.2 Atmosphere and clean air
Indicator name	***EERN29: CO2 sequestration capacity***
Indicator level	Outcome
Purpose of indicator	Carbon dioxide, produced by human activities, is a major cause of global climatic change and global warming. Carbon dioxide sequestration capacity is and indicator of general ability to fix CO_2. The level of the final carbon dioxide production depends mainly on three factors: the technologies involved in the production of the pollutions, natural and artificial carbon dioxide sequestration capacity. The total production of carbon dioxide is an equation of these three factors. The first factor could be eliminated by using more advanced technologies and renewable resources: older power plants, cars or others produce more CO_2 due to their lesser efficiency. The second factor includes many natural features present in the studied area: the level of the biomass production, the way in which CO_2 is stored and the intensity of CO_2 leakage from the natural reservoirs. The third factor consists of artificial CO_2 sequestration technologies, using mainly agricultural crop management or geoindustry, which creates artificial CO_2 reservoirs via geological sequestration and related methods. In general, the largest potential to reduce CO_2 emissions is in using renewable energies and clean advanced technologies, followed by artificial carbon sequestration, the energetic demands of which can outweigh its benefits.
What the indicator measures	The indicator measures the capacity to fix CO_2 compared to baseline (situation prior to intervention).
Data sources	Project documents and records Stakeholders Municipalities
Methods of data collection	Desk research Surveys Interviews
Definition of key terms	**Carbon sequestration (CCS)** is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide. Carbon sequestration involves long-term storage of carbon dioxide or other forms of carbon to mitigate or defer global warming. It has been proposed as a way to slow the atmospheric and marine accumulation of greenhouse gases, which are released by burning fossil fuels.
Further resources	IEA (2013), Technology Roadmap Carbon Capture and Storage, OECD/IEA, Paris. (link) Pires, J. C. M., Martins, F. G., Alvim-Ferraz, M. C. M., & Simões, M. (2011). Recent developments on carbon capture and storage: an overview. Chemical Engineering Research and Design, 89(9), 1446-1460.

EERN30: Ratio of inhabitants per source of safe drinking water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN30: Ratio of inhabitants per source of safe drinking water***
Indicator level	Outcome
Purpose of indicator	The purpose of the indicator is to measures the number of people with access to safe drinking water sources which they gained due to a project implementation. An access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. Improving access to safe drinking-water can result in tangible benefits to health and quality of life in general.
What the indicator measures	The proportion of inhabitants provided with a source of clean drinking water as a result of the intervention compared to the baseline.
Data sources	Project records Stakeholders (implementers and beneficiaries) Local statistics
Methods of data collection	Desk research Survey Interviews
Definition of key terms	**Safe drinking water.** Water which does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Safe drinking-water is suitable for all usual domestic purposes, including personal hygiene. **Sources of drinking water**. 1. Piped water on premise or 2. Other improved drinking water sources: public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection. **Access to safe drinking water:** Access to safe water is measure by the proportion of population with access to an adequate amount of safe drinking water located within a convenient distance from the user's dwelling. Access is interpreted as actual use by the population.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link) Sobsey, M.D., Stauber, C.E., Casanova, L.M., Brown, J.M. & Elliott, M.A. (2008). Point of Use Household Drinking Water Filtration: A Practical, Effective Solution for Providing Sustained Access to Safe Drinking Water in the Developing World. (link) WHO. (2004). Guidelines for drinking-water quality (Vol. 1). (link)

EERN31: Percentage of inhabitants that regularly use newly provided sources of safe drinking water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN31: Percentage of inhabitants that regularly use newly provided sources of safe drinking water***
Indicator level	Outcome
Purpose of indicator	The indicator provides an overview of the usage of newly provided sources of safe drinking water which were supported by the project. An access to safe drinking-water is essential to health, a basic human right and a component of effective policy for health protection. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Water is essential to sustain life, and a satisfactory (adequate, safe and accessible) supply must be available to all. In some regions, it has been shown that investments in water supply and sanitation can yield also a net economic benefit, since the reductions in adverse health effects and health care costs outweigh the costs of undertaking the interventions.
What the indicator measures	Percentage of inhabitants who regularly (with a constant pattern) use newly provided sources of safe drinking water constructed from with a financial or other support of a project compared to baseline (situation prior to the intervention).
Data sources	Project and institutions' records, stakeholders
Methods of data collection	Desk research, Interviews, Surveys
Definition of key terms	**Safe drinking water.** Water which does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages. Those at greatest risk of waterborne disease are infants and young children, people who are debilitated or living under unsanitary conditions and the elderly. Safe drinking-water is suitable for all usual domestic purposes, including personal hygiene. **Sources of drinking water**. 1. piped water on premise or 2. other improved drinking water sources: public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons. (link) Sobsey, M.D., Stauber, C.E., Casanova, L.M., Brown, J.M. & Elliott, M.A. (2008). Point of Use Household Drinking Water Filtration: A Practical, Effective Solution for Providing Sustained Access to Safe Drinking Water in the Developing World. (link) WHO. (2004). Guidelines for drinking-water quality (Vol. 1). (link)

EERN32: Percentage of inhabitants that regularly use newly installed or upgraded sanitation facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN32: Percentage of inhabitants that regularly use newly installed or upgraded improved sanitation facilities***
Indicator level	Outcome
Purpose of indicator	Over two billion people still lack access to improved sanitation, and therefore practise open defecation, resulting in high levels of environmental contamination and exposure to the risks of microbial infections, diarrhoeal diseases (including cholera), trachoma, schistosomiasis and hepatitis. Poor sanitation is also the second leading cause of death of children under five. The purpose of this indicator is to provide an overview of the usage of newly installed or upgraded sanitation facilities in targeted areas.
What the indicator measures	Percentage of inhabitants who regularly (with a constant pattern) use newly constructed or upgraded sanitation facilities from with a financial or other support of a project compared to baseline (situation prior to the intervention).
Data sources	Project and institutions' records, stakeholders, sanitation facilities
Methods of data collection	Desk research, interviews, surveys, observation
Definition of key terms	**Improved sanitation facilities** include sanitation facilities that hygienically separate human excreta from human contact.
Further resources	Kvarnström, E., McConville, J., Bracken, P., Johansson, M., & Fogde, M. (2011). The sanitation ladder–a need for a revamp? (link). WHO. (2015). Progress on sanitation and drinking water: 2015 update and MDG assessment. (link)

EERN33: Water footprint of products/services produced with project support

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN33: Water footprint of products/services produced with project support***
Indicator level	Outcome
Purpose of indicator	This information is used to assess the sustainability of an activity i.e. whether a certain product/service contributes to specific hotspots of water scarcity or pollution as well as social and economic consequences. By assessing the sustainability of the impact, response strategies can be formulated to directly target activities that lead to water scarcity and pollution. Consequently, Water Footprint Assessment can be used to improve water source protection. Making a water footprint can help identifying products that can be risky to produce at a certain location and at a certain period of time. A water footprint can help achieve a more sustainable and equitable use of fresh water.
What the indicator measures	The indicator measures of the water footprints of all the process steps needed to produce product/services supported by project. It is measured by volume per unit of product (e.g. unit of mass, money, energy, per piece).
Data sources	Global water footprint standard ISO: 14046:2014
Methods of data collection	Desk research
Definition of key terms	**Water footprint** quantifies the usage of water by human activities in terms of volumes. Moreover, it considers where, when and what kind of water sources are used. **The water footprint of a product** is an empirical indicator of how much water is consumed, when and where, measured over the whole supply chain of the product. Thus, the water footprint is a multidimensional indicator, showing volumes but also making explicit the type of water use (evaporation of rainwater, surface water or groundwater, or water pollution) and the location and timing of water use.
Further resources	WULCA. Life cycle initiative project focusing on water use assessment and water footprinting taking the life cycle perspective. (link). ISO: 14046:2014. Environmental management. Water footprint. Principles, requirements and guidelines (link). Chapagain, A. K. et al. (2004): Water Footprints of Nations - Volume 1: Main Report. Research Report Series No. 16, 1. Delft: UNESCO-IHE, Institute for Water Education.

EERN34: Water quality of the watercourse

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN34: Water quality of the watercourse***
Indicator level	Outcome
Purpose of indicator	Water, a prime natural resource and precious national asset, forms the chief constituent of ecosystem. Water sources may be mainly in the form of rivers, lakes, glaciers, rain water, ground water etc. Besides the need of water for drinking, water resources play a vital role in various sectors of economy such as agriculture, livestock production, forestry, industrial activities, hydropower generation, fisheries and other creative activities. Proper identification of water quality conditions in a river system based on limited observations is an essential task for meeting the goals of environmental management. The suitability of water sources for human consumption has been described in terms of Water quality index (WQI), which is one of the most effective ways to describe the quality of water.
What the indicator measures	The indicator measures the quality of the watercourse which could be affected by a project activity. It can be measured by a water quality index (WQI). It uses ten most commonly used water quality variables like dissolved oxygen (DO), pH, coliforms, specific conductance, alkalinity and chloride etc. The assigned weight reflected significance of a parameter for a particular use and has considerable impact on the index.
Data sources	Water quality assessment Project and institutional reports and documentation Stakeholders
Methods of data collection	Measurement Desk research Interviews
Definition of key terms	**Watercourse** is the channel that a flowing body of water follows. **Water Quality Index (WQI)** helps in understanding the general water quality status of a water source and hence it has been applied for both surface and ground water quality assessment all around the world since the last few decades. The main purpose of developing a WQI is to transform a complex set of water quality data into lucid and exploitable information by which a layman can know the status of the water source. **Biological Oxygen Demand (BOD)** is the biochemical oxygen demand of the water and it is related to the concentration of the bacterial facilitated decomposable organic material in the water.
Further resources	Bora, M., & Goswami, D. C. (2016). Water quality assessment in terms of water quality index (WQI): case study of the Kolong River, Assam, India. *Applied Water Science*, 1-11. (link). Lumb, A., Sharma, T. C., & Bibeault, J. F. (2011). A review of genesis and evolution of water quality index (WQI) and some future directions. *Water Quality, Exposure and Health*, *3*(1), 11-24. (link). Tyagi, S., Sharma, B., Singh, P., & Dobhal, R. (2013). Water quality assessment in terms of water quality index. American Journal of Water Resources, 1(3), 34-38.(link).

EERN35: Number of cases of waterborne disease and malaria

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN35: Number of cases of waterborne disease and malaria***
Indicator level	Outcome
Purpose of indicator	Waterborne diseases and malaria are linked to significant disease burden worldwide. Waterborne diseases arise from the contamination of water, poor hygiene and sanitation, either by pathogenic viruses, bacteria or protozoa or by chemical substances. These agents are directly transmitted to people when the water is used for drinking, preparing food, recreation or other domestic purposes. Botha waterborne diseases and malaria can have a significant impact on the economy, locally as well as internationally. People who are infected by a waterborne disease are usually confronted with related costs and not seldom with a huge financial burden. This is especially the case in less developed countries.
What the indicator measures	This indicator assesses the number of reported cases of waterborne disease and malaria in the selected area compared to the baseline (situation prior intervention).
Data sources	Health centres and facilities Institutional and project reports and documents Regional and national surveys (infectious diseases monitoring system) Health workers Officials and other stakeholders including beneficiaries
Methods of data collection	Desk research Interviews Focus Group Survey
Definition of key terms	**Waterborne diseases** are caused by pathogenic microorganisms that most commonly are transmitted in contaminated fresh water. Infection commonly results during bathing, washing, drinking, in the preparation of food, or the consumption of food that is infected.
Further resources	Jensen, P. K. et al. (2002). Domestic transmission routes of pathogens: the problem of in-house contamination of drinking water during storage in developing countries. Tropical Medicine & International Health, 7(7), 604-609. (link). Hutton, G., Haller, L., Water, S., & World Health Organization. (2004). Evaluation of the costs and benefits of water and sanitation improvements at the global level. (link)

EERN36: Wastewater treatment coverage

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN36: Wastewater treatment coverage***
Indicator level	Outcome
Purpose of indicator	Wastewater from households and different industries represent a significant pressure on the environment and treatment is normally required before discharge. Discharge of untreated domestic wastewater is a predominant source of pollution of water resources. The indicator measures progress or decline of wastewater safely treated among the targeted area.
What the indicator measures	The indicator measures a proportion of population connected to the wastewater treatment facilities compared to the baseline (situation prior the intervention).
Data sources	Stakeholders including beneficiaries Project documentation and reports, continuous monitoring after project end Households within targeted communities National statistics offices
Methods of data collection	Desk research Observation, site visits Interviews Focus groups Survey, population census
Definition of key terms	**Waste water treatment** is any process that makes water more acceptable for a specific end-use. The end use may be drinking, industrial water supply, irrigation, river flow maintenance, water recreation, etc., including being safely returned to the environment. Water treatment removes contaminants and undesirable components, or reduces their concentration so that the water becomes fit for its desired end-use.
Further resources	Kawamura, S. (2000). Integrated design and operation of water treatment facilities. John Wiley & Sons (link) WHO. (2004). Guidelines for drinking-water quality (Vol. 1). (link)

EERN37: Groundwater quality

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN37: Groundwater quality***
Indicator level	Outcome
Purpose of indicator	Ground water is less susceptible to bacterial pollution than surface water because the soil and rocks through which ground water flows screen out most of the bacteria. The quality of groundwater can affect not only our health, but also society and the economy. Groundwater contamination can adversely affect property values, the image of a community, economic development, and the overall quality of life we all share.
What the indicator measures	The indicator measures the quality of the groundwater compered to baseline (situation prior to intervention). It can be measured by a water quality index (WQI). It uses ten most commonly used water quality variables like dissolved oxygen (DO), pH, coliforms, specific conductance, alkalinity and chloride etc. The assigned weight reflected significance of a parameter for a particular use and has considerable impact on the index.
Data sources	Water quality assessment Project and institutional reports and documentation Stakeholders
Methods of data collection	Measurement Desk research Interviews
Definition of key terms	**Water Quality Index (WQI)** helps in understanding the general water quality status of a water source and hence it has been applied for both surface and ground water quality assessment all around the world since the last few decades. The main purpose of developing a WQI is to transform a complex set of water quality data into lucid and exploitable information by which a layman can know the status of the water source.
Further resources	Bora, M., & Goswami, D. C. (2016). Water quality assessment in terms of water quality index (WQI): case study of the Kolong River, Assam, India. (link)

EERN38: Sanitation coverage

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN38: Sanitation coverage***
Indicator level	Outcome
Purpose of indicator	Universal access to adequate sanitation is a fundamental need and human right. Securing access for all would go a long way in reducing illness and death, especially among children. Over two billion people still lack access to improved sanitation. The purpose of this indicator is to provide an overview of the access to improved sanitation facilities within targeted communities, and to track the changes which occurred over the implementation phase of the project.
What the indicator measures	Sanitation coverage is measured by the percentage of the population using improved sanitation facilities compared to baseline (situation prior the intervention). It measures either increase or decrease of access to sanitation facilities.
Data sources	Stakeholders including beneficiaries Project documentation and reports, continuous monitoring after project end Households within targeted communities National statistics offices
Methods of data collection	Desk research Observation, site visits Interviews Focus groups Survey, population census
Definition of key terms	**Sanitation coverage** is a percentage of population with an access to improved sanitation facilities. An improved sanitation facility is one that hygienically separates human excreta from human contact. Improved sanitation facilities include: flush or pour-flush to piped sewer system, septic tank or pit latrine; ventilated improved pit latrine; pit latrine with slab and composting toilet.
Further resources	Kvarnström, E., McConville, J., Bracken, P., Johansson, M., & Fogde, M. (2011). The sanitation ladder–a need for a revamp? (link) WHO. (2015). Progress on sanitation and drinking water: 2015 update and MDG assessment. (link)

EERN39: Water use intensity of households.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN39: Water use intensity of households***
Indicator level	Outcome
Purpose of indicator	This indicator shows the intensity of water resources use and the level of household pressure on water resources. This indicator is important for policies of water allocation since in water-scarce regions, where there is competition for water among various users; water is likely to be allocated to the less intensive use. When this indicator is monitored over time, it shows whether the area manages its water resources to improve economic performance while simultaneously reducing the impact on the environment. Water conservation policies aiming at improving water intensity (through, for example, recycling and better water-saving technologies) ultimately reduce pressure on the environment.
What the indicator measures	This indicator measures the intensity of water use within households in terms of volumes of water per unit of value added and is compared to baseline (prior to intervention).
Data sources	Project and institutional records and documentation Regional and/or national statistics Stakeholders
Methods of data collection	Desk research Survey Interview
Definition of key terms	**Resource intensity** is a measure of the resources needed for consumption, production, processing and disposal of a unit of good and services. It is a measure of efficiency of resource use.
Further resources	United Nations (2006b). System of Environmental-Economic Accounting for Water (link).

EERN40: Percentage of households using rain water

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN40: Percentage of households using rain water***
Indicator level	Outcome
Purpose of indicator	Rainwater harvesting provides an independent water supply during regional water restrictions, and in developed countries, is often used to supplement the main supply. It provides water when a drought occurs, can help mitigate flooding of low-lying areas, and reduces demand on wells which may enable groundwater levels to be sustained. The indicator's purpose is to measure the change (either positive or negative) which occurred during the period of project.
What the indicator measures	The indicator measures a percentage of households using rain water for their own need compared to baseline (situation prior the intervention).
Data sources	Stakeholders including beneficiaries Project documentation and reports, continuous monitoring after project end
Methods of data collection	Desk research Observation, site visits Interviews Focus groups Survey
Further resources	Boers, T. M., & Ben-Asher, J. (1982). A review of rainwater harvesting. (link) Gowing, J. W., Mahoo, H. F., Mzirai, O. B., & Hatibu, N. (1999). Review of rainwater harvesting techniques and evidence for their use in semi-arid Tanzania. (link)

EERN41: Increase in water fee collections rates

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN41: Increase in water fee collections rates***
Indicator level	Outcome
Purpose of indicator	Water and wastewater tariffs determine the level of revenues that service providers receive from users in centralised or semi-centralised systems for the appropriate catchment, purification and distribution of freshwater, and the subsequent collection, treatment and discharge of wastewater. Water pricing is seen as an important economic instrument for improving water use efficiency, enhancing social equity and securing financial sustainability of water utilities and operators.
What the indicator measures	The indicator compares water fee collection rates at the time of evaluation to baseline (prior to the intervention). The indicator is measured as a ratio.
Data sources	Water municipalities Multilateral and Regional Development Banks Regional and national statistics Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Water Fees Collected.** Actual monetary amount collected/received by the water operator from different consumers for providing water supply and sanitation services.
Further resources	The International Benchmarking Network for Water and Sanitation Utilities (IBNET). (link). OECD, 2007, Financing water supply and sanitation in EECCA countries and progress in achieving water-related Millennium Development Goals (MDGs). (link).

EERN42: Annual freshwater withdrawals for project-supported activities after project end

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.3 Water and sanitation
Indicator name	***EERN42: Annual freshwater withdrawals for project-supported activities after project end***
Indicator level	Outcome
Purpose of indicator	While some countries have an abundant supply of fresh water, others do not have as much. UN estimates that many areas of the world are already experiencing stress on water availability. Due to the accelerated pace of population growth and an increase in the amount of water a single person uses, it is expected that this situation will continue to get worse. The ability of developing countries to make more water available for domestic, agricultural, industrial and environmental uses will depend on better management of water resources and more cross-sectorial planning and integration Properly managed water resources are a critical component of growth, poverty reduction and equity.
What the indicator measures	The indicator can measure either m3 of annual water withdrawal per capita, percentage of m3 per capita or percentage of total renewable resources per activity used for project-supported activities. All options are possible and all should be compared to the baseline (situation prior the intervention).
Data sources	Project and related institutional records and documents Stakeholders
Methods of data collection	Desk research Interviews Focus groups
Definition of key terms	**Fresh water withdrawal** or water abstractions are defined as freshwater taken from ground or surface water sources, either permanently or temporarily, and conveyed to a place of use. **Annual freshwater withdrawals** refer to total water withdrawals, not counting evaporation losses from storage basins. Withdrawals can exceed 100 percent of total renewable resources. Withdrawals for agriculture and industry are total withdrawals for irrigation and livestock production and for direct industrial use (including withdrawals for cooling thermoelectric plants). Withdrawals for domestic uses include drinking water, municipal use or supply, and use for public services, commercial establishments, and homes
Further resources	World Bank Data (link) OECD Data (link)

EERN50: Waste collection rate.

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EER50: Waste collection rate***
Indicator level	Outcome
Purpose of indicator	Waste collection services come in a wide variety of shapes and forms. Services may be delivered by the formal sector, through either public- or private-sector operators, or by the community or 'informal' sector, through for example community based organizations, NGOs or micro- and small enterprises. Services may be on a relatively small scale, providing primary collection to local neighbourhoods, or on a larger scale, providing either secondary collection or an integrated collection service across the city. Pickup is carried out by a range of vehicle types, such as bicycles, tractor and trailer, tipper trucks or purpose-build compaction vehicles, and sometimes by pushcarts or animal powered carts. It can be estimated that at least 2 billion people worldwide still lack access to solid waste collection.
What the indicator measures	This indicator measures the rate of waste collection at specific time compared to baseline (situation prior to the intervention). It measures the amount of waste that is collected and transferred from the point of use and disposal to the point of treatment or landfill.
Data sources	Project and institutional records and documentation Regional and national reports/legislation National statistics Municipalities Stakeholders
Methods of data collection	Desk research Interviews Focus groups
Definition of key terms	**Waste collection** is the collection of solid waste from point of production (residential, industrial commercial, institutional) to the point of treatment or disposal.
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERN51: Waste separation volume

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN51: Waste separation volume compared to baseline***
Indicator level	Outcome
Purpose of indicator	Separation is a key element for further disposal and treatment of waste. There are two aspects of separation. The first is the degree of mixing of different elements or materials within a product, or the concentration at which the element is present, which can be addressed through design for recyclability. The second is to keep different 'wastes' separate at the point of generation, to ensure that they remain clean and uncontaminated by other waste streams. Separation at source has several benefits: maintains a higher quality of material for recycling, decreases the occupational risks for waste workers, and means that waste can most often be sent straight to the correct place for processing, instead of one facility to be separated and then another to be processed. There are many separation schemes in effect across the world and it depends on each municipality as to what will work best.
What the indicator measures	The indicator measures separation volume within the certain period of time compared to baseline study (situation prior to intervention).
Data sources	Project and institutional records and documentation Regional and national reports National statistics Municipalities Stakeholders
Methods of data collection	Desk research Interviews Focus groups
Definition of key terms	**Waste separation** is a process by which waste is separated into different elements (glass, organic, metal, plastic, paper, etc.)
Further resources	Brunner, P. H., & Fellner, J. (2007). Setting priorities for waste management strategies in developing countries. (link). Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERN52: Percentage change in the use of different waste treatment methods

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN52: Percentage change in the use of different waste treatment methods***
Indicator level	Outcome
Purpose of indicator	There are a number of different waste treatment methods for the disposal, recycling, storage, or energy recovery from different waste types. Each type has its own advantages and disadvantages and can be used in a certain contexts. The purpose of this indicator is to follow an evolution of waste treatment solution in targeted area which happened with contribution of a project.
What the indicator measures	Change in percentage of the use of different waste treatments methods within an established period compared to baseline (situation prior the intervention).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipalities Stakeholders
Methods of data collection	Surveys and household survey Desk research
Definition of key terms	**Waste treatment methods** are techniques to reduce a volume and toxicity of solid waste. The major treatment and disposal methods are: incineration (combustion of waste material in the presence of oxygen), Gasification and Pyrolysis (decompose organic waste materials), open burning, landfills, dumps, composting, anaerobic digestion.
Further resources	Wilson, D. C. et al. (2015). Global waste management outlook. (link) Zaman, A. U. (2010). Comparative study of municipal solid waste treatment technologies using life cycle assessment method. International Journal of Environmental Science & Technology, 7(2), 225-234.

EERN53: Generation and disposal of municipal waste per capita

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN53: Generation and disposal of municipal waste per capita***
Indicator level	Outcome
Purpose of indicator	The municipal waste indicator shows trends in the amounts of such waste generated and the amounts recovered and disposed of through recycling, composting, incineration (including energy recovery), and landfill. Municipal solid waste (MSW) generation rates are influenced by economic development, the degree of industrialization, public habits, and local climate of the region. Generally, the higher the economic development and rate of urbanization, the greater the amount of solid waste produced. Municipal waste constitutes only around 10 % of total waste generated, but because of its heterogeneous composition the environmentally sound management is challenging. The way municipal waste is managed thus gives a good indication of the quality of the overall waste management system. The main purpose is to show the trend in the generation of waste produced by different human activities. Waste generation per capita allows comparisons of countries with similar economies.
What the indicator measures	The indicator measures generation and disposal of municipal waste at the time of evaluation compared to baseline (situation prior the intervention). It is expressed in kilos per inhabitant.
Data sources	National statistics Official government publications Reports by international agencies Peer reviewed journals Municipalities Stakeholders
Methods of data collection	Interviews Survey Desk research
Definition of key terms	**Waste generation:** quantity of materials or products that enter a waste stream before composting, incinerating, landfilling, or recycling.
Further resources	Hoornweg, D., & Bhada-Tata, P. (2012). What a waste: a global review of solid waste management. (link) Wilson, D. C. et al. (2015). Global waste management outlook. (link)

EERN54: Generation and disposal of industrial waste before and after project

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN54: Generation and disposal of industrial waste before and after project***
Indicator level	Outcome
Purpose of indicator	Industrial waste (liquid, solid, air pollutant) generation and composition vary depending on the type of industry and processes/technologies. Every category of industrial waste highly impacts environment. This indicator aims to measures 'performance' and/or tracks increase/decline of industrial waste amount and can also work as a basis for assessment by providing information on conditions and trends of industrial waste management in the targeted area.
What the indicator measures	The indicator measures generation and disposal of industrial waste at the time (year) of evaluation compared to baseline (situation prior the intervention). It is expressed in tonnes a year. A numeric value of the indicator makes it easier to interpret the situation and/or compare previous and present state.
Data sources	National statistics Official government publications Reports by international agencies Peer reviewed journals Municipalities Stakeholders
Methods of data collection	Survey Desk research Interviews
Definition of key terms	**Industrial waste** is the waste produced by industrial activity which includes any material that is rendered useless during a manufacturing process such as that of factories, industries, mills, and mining operations. Examples of industrial wastes: chemical solvents, paints, sandpaper, paper products, industrial by-products, metals, and radioactive wastes. **Waste generation:** quantity of materials or products that enter a waste stream before composting, incinerating, landfilling, or recycling.
Further resources	Nemerow, N. L., & Dasgupta, A. (1991). Industrial and hazardous waste treatment. Woodard, F. (2001). Industrial waste treatment handbook. Butterworth-Heinemann. (link)

EERN55: Recycling and reuse of waste per capita

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN55: Recycling and reuse of waste per capita***
Indicator level	Outcome
Purpose of indicator	Benefits of recycling are: reduction of the amount of waste sent to landfills and combustion facilities, conservation natural resources such as timber, water, and minerals, prevention of pollution by reducing the need to collect new raw materials, saving energy and reduction of greenhouse gas emissions. Recycling may also provide a source of income, help conserve scarce resources and reduce the quantities of waste requiring disposal. The success of recycling depends critically on materials being kept separate and clean and being found in sufficiently high concentrations. The recycling rate is highly relevant for measuring progress towards a circular economy.
What the indicator measures	Percentage of total weight waste per capita which was recycled or reused with a financial or other project support over a certain period of time compared to baseline (situation prior to intervention).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Desk research Interviews Focus groups
Definition of key terms	**Recycling** is a resource recovery practice that refers to the collection and reuse of waste materials such as empty beverage containers. The materials from which the items are made can be reprocessed into new products. Material for recycling may be collected separately from general waste using dedicated bins and collection vehicles, a procedure called kerbside collection.
Further resources	Wilson, D. C. et al. (2015). Global waste management outlook. (link) Zaman, A. U. (2010). Comparative study of municipal solid waste treatment technologies using life cycle assessment method. International Journal of Environmental Science & Technology, 7(2), 225-234.

EERN56: Number of people exposed to nuisances

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN56: Number of people exposed to nuisances, e.g. noise or odour.***
Indicator level	Outcome
Purpose of indicator	Different land uses, infrastructures, industrial activities and residential patterns expose simultaneously people to several annoying sources (nuisance). Noise or odour can often be an actual nuisance for communities and residents, especially those who are downwind from specific plants and/or activities (composting facility, wastewater treatment plant, fast food, restaurant, traffic, animals, solid waste management, etc.). Nuisance has the potential to compromise the livability at a local or regional scale. This indicator helps to identify whether the targeted areas are sensitive to both noise and, generally, odour impacts.
What the indicator measures	Indicator measures the number of people who are exposed to nuisance (noise, odour) that would appear due to project activities.
Data sources	Project and institutional records and documentation Municipal governments Stakeholders including beneficiaries
Methods of data collection	Interviews Survey Focus group discussion Desk research
Definition of key terms	**Noise and odour nuisance** is a feeling of displeasure associated with any agent or condition (related to sound or odour) that is believed to affect adversely an individual or a group. There are different definitions of noise and odour annoyance, but the most common view of both is that they are indicators of nuisance, disturbance or disruption to intended or actual activities.
Further resources	Fasolino, I., Grimaldi, M., Zarra, T., & Naddeo, V. (2016). Odour control strategies for a sustainable nuisance action plan. (link)

EERN57: Hazardous waste generated by project-supported products or facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN57: Hazardous waste generated by project-supported products or facilities***
Indicator level	Outcome
Purpose of indicator	Hazardous waste occurrence is relatively low compared to the generated waste total but potentially very damaging to both the environment and human health. The general waste policy (including hazardous waste) is the prevention of waste. This includes the reduction of the amount of waste generated (quantitative prevention) as well as the reduction of the hazardousness of the waste generated (qualitative prevention). Hazardous waste generation can thus be used as an indicator for measuring the quantitative and the qualitative prevention of waste during the project length.
What the indicator measures	The indicator measures the amount of hazardous waste generated by project supported products or facilities at the end of the project compared to baseline (situation prior to intervention) expressed in tonnes a year or kilos per capita. It covers all waste classified as hazardous under the definition in the Waste Framework Directive (Directive 2008/98/EC). The indicator shows the hazardous waste generation over time.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Desk research Survey Interviews
Definition of key terms	**Hazardous wastes** means wastes (liquids, solids, contained gases, or sludge) other than radioactive wastes which, by reason of their chemical activity or toxic, explosive, corrosive, or other characteristics, cause danger or likely will cause danger to health or the environment, whether alone or when coming into contact with other waste.
Further resources	LaGrega, M. D., Buckingham, P. L., & Evans, J. C. (2010). Hazardous waste management. Waveland Press. (link).

EERN58: Special treatment of hazardous waste

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN58: Special treatment of hazardous waste***
Indicator level	Outcome
Purpose of indicator	One of the major environmental issues for countries has been the management of hazardous wastes. This issue has manifested itself in the form of two questions: how to prevent environmental deterioration caused by the generation of hazardous wastes, and how to effectively clean up the problems caused by past examples of improper disposal. Both of these questions are complex, depending for resolution on many social and technical factor. Common treatment (e.g. landfills) of hazardous waste can result in unfavourable amounts of hazardous materials in water, ground or air. Special treatment is required; for example a barrier has to be installed along the foundation of the landfill, hazardous wastes must often be stabilized and solidified before treatment, or can be recycled. It is important to know the quantities of hazardous waste being specially treated so we can track whether we are reducing the quantities of not being treated suitably. It also helps to gain information about treatment of hazardous waste and poses pressure information on changes in risk to the environment.
What the indicator measures	The indicator measures amount of hazardous waste specially treated in tonnes/kilos/litres a year at the end of the project compared to baseline (situation prior the intervention).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Commercial operators Stakeholders
Methods of data collection	Desk research Survey Interviews
Definition of key terms	**Hazardous wastes** means wastes (liquids, solids, contained gases, or sludge) other than radioactive wastes which, by reason of their chemical activity or toxic, explosive, corrosive, or other characteristics, cause danger or likely will cause danger to health or the environment, whether alone or when coming into contact with other waste.
Further resources	LaGrega, M. D., Buckingham, P. L., & Evans, J. C. (2010). Hazardous waste management. Waveland Press. (link) Wang, L. K., Hung, Y. T., Lo, H. H., & Yapijakis, C. (Eds.). (2004). Handbook of industrial and hazardous wastes treatment. CRC Press. (link)

EERN59: Volume of waste turned into energy

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.4 Waste and waste management
Indicator name	***EERN59: Volume (or percentage) of waste turned into energy***
Indicator level	Outcome
Purpose of indicator	Wastes and biomass fuels are usually viewed as sustainable energy sources. Wastes are convertible to useful energy forms like hydrogen (bio hydrogen), biogas, bio alcohol, etc., through waste-to-energy technologies. Waste to energy has the advantage of being able to completely remove waste, rather than reuse or process it. It can also help to reduce carbon emissions by offsetting the need for energy from fossil sources.
What the indicator measures	The indicator measures ratio of waste turned into energy at the end of the project compared to baseline (situation prior to intervention). It can be compared in absolute values (amount of waste in tonnes/kilos or in percentage).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Commercial operators Waste to energy facilities Stakeholders
Methods of data collection	Desk research Survey Interviews
Definition of key terms	**Waste to energy (**WtE) process involves converting of non-recyclable waste items into useable heat, electricity, or fuel through a variety of processes. This type of source of energy is a renewable energy source as non-recyclable waste can be used over and over again to create energy.
Further resources	Karagiannidis, A. (2012). Waste to energy. Springer. (link)

EERN70: Reduced energy consumption in project-affected communities/facilities

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EER70: Reduced energy consumption in project-affected communities/facilities***
Indicator level	Outcome
Purpose of indicator	In tandem with supply-side policies, there is growing number of initiatives which aim to increase the efficiency of energy use and reduce energy demand. By using energy more efficiently, it can lower energy costs, reduce the reliance on external suppliers of oil and gas, and help protect the environment. Energy efficiency has to be increased at all stages of the energy chain, from generation to final consumption. At the same time, the benefits of energy efficiency must outweigh the costs, for instance those that result from carrying out renovations.
What the indicator measures	The indicator measures the reduction of energy consumption in project affected areas/communities and facilities compared to baseline (situation prior to intervention). The indicator can be expressed in percentage or in absolute terms.
Data sources	Project and institutional records and documentation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Efficient energy use,** sometimes simply called energy efficiency, is the goal to reduce the amount of energy required to provide products and services. Improvements in energy efficiency are generally achieved by adopting a more efficient technology or production process or by application of commonly accepted methods to reduce energy losses.
Further resources	Greening, L. A., Greene, D. L., & Difiglio, C. (2000). Energy efficiency and consumption—the rebound effect—a survey. Energy policy, 28(6), 389-401. IEA. (2016). Energy efficiency market report 2016. (link)

EERN71: Use of renewable energy before and after

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERN71: Use of renewable energy before and after***
Indicator level	Outcome
Purpose of indicator	Aside from combating climate change through a reduction in greenhouse gas emissions, the use of renewable energy sources is likely to result in more secure energy supplies, greater diversity in energy supply, less air pollution, as well as the possibility for job creation in environmental and renewable energy sectors. The renewable energy technologies can meet much of the growing demand at prices lower than those usually forecast for conventional energy.
What the indicator measures	The indicator measures the percentage of renewable energy used by project activities at the end of a project compared to baseline (prior to the intervention).
Data sources	Project and institutional records and documentation Municipalities Stakeholders
Methods of data collection	Desk research Interviews Survey
Definition of key terms	**Renewable sources of energy** are sources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.
Further resources	Johansson, T. B., & Burnham, L. (Eds.). (1993). Renewable energy: sources for fuels and electricity. Island press. (link)

EERN72: Emissions of air pollutants from energy-producing plants and processes

Crosscutting theme	Environmental sustainability
Dimension	1. Environmental effects
Subdimension	1.5 Energy efficiency and renewable energy
Indicator name	***EERN72: Emissions of air pollutants from energy-producing plants and processes***
Indicator level	Outcome
Purpose of indicator	Energy generation is the number one cause of air pollution and the leading cause of global warming emissions. The generation of electric power produces more pollution. Coal produces more pollution than any other energy source followed by natural gas and oil. Fossil fuels constitute a significant repository of carbon buried deep underground. Burning those results in the conversion of this carbon to carbon dioxide, this is then released into the atmosphere. Depending on the particular fossil fuel and the method of burning, other emissions may be produced as well. Ozone, sulfur dioxide, NO2 and other gases.
What the indicator measures	The indicator compares the amount of emissions of air pollutants from energy- producing plants and processes at the beginning of the intervention and at the time of evaluation.
Data sources	Own measurements/field work Project and institutional reports and documentation Stakeholders
Methods of data collection	Desk research Interviews Survey Measurement
Definition of key terms	**Air pollutant** is any substance in air that could, in high enough concentration, harm animals, humans, vegetation, and/or materials. Such pollutants may be present as solid particles, liquid droplets, or gases. Air pollutants fall into two main groups: (1) those emitted from identifiable sources and, (2) those formed in the air by interaction between other pollutants. Over one hundred air pollutants have been identified, which include halogen compounds, nitrogen compounds, oxygen compounds, radioactive compounds, sulphur (sulfur) compounds, and volatile organic chemicals (VOC).
Further resources	Jacobson, M. Z. (2009). Review of solutions to global warming, air pollution, and energy security. Energy & Environmental Science, 2(2), 148-173 (link).

EGRN1: Number of environmental or environment-related measures that have been developed

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN1: Number of environmental or environment-related measures that have been developed***
Indicator level	Outcome
Purpose of indicator	The state of the environment is a major factor determining the quality of the life anywhere on the Earth and can be – in extreme cases – also a reason of massive outflow of the local inhabitants, if any place became inhabitable, e.g. due to extreme climate. There is a limited possibility to eliminate these processes via measures, introduced to improve the environment´s state. Their development is just a first step, more important is their successful implementation, measurable only by systematic environmental monitoring, which should be extensive and long-term, because many changes may be caused by inherent parameters of the environment and temporal, unlinked to the new measures.
What the indicator measures	The indicator measures the number of environment-related policies, regulations and other measures that have been developed and implemented with a project support
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research, content analysis
Definition of key terms	**Policy**: Policy is a set of rules and procedures that ensure legal representation of the interests of citizens through representative democracy. It lays out the vision, goals, and objectives for leadership and governance. Policies may include decisions, guidelines, legislations, and regulations. The main policy actors are political parties and politicians, elected members of the Parliament and local government.
Further resources	Lafferty, W., & Hovden, E. (2003). Environmental policy integration: towards an analytical framework. Environmental politics, 12(3), 1-22. (link)

EGRN2: Number/percentage and type of environmental regulations, policies and bylaws, which were informed by scientific evidence

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN2: Number/percentage and type of environmental regulations, policies and bylaws, which were informed by scientific evidence***
Indicator level	Outcome
Purpose of indicator	The quality of public decision making depends significantly on the quality of analysis and advice provided through public organizations. There have been calls among decision makers, interest groups, citizens, and scientists alike for more science-based environmental policy. The assumption is that including scientists and scientific information will improve the quality of complex policy decisions. The assumption is that scientists can and should facilitate the resolution of public environmental decisions by providing objective scientific information to policymakers and the public and by becoming more involved in policy arenas.
What the indicator measures	The indicator measures the number and type of environmental regulations, policies and bylaws, which were informed by scientific evidence with help of the project compared to baseline (situation prior to intervention).
Data sources	Project and institutional records and documentation Regional and national legislation (regulations, policies, bylaws) Municipal governments Stakeholders
Methods of data collection	Desk research, content analysis Focus group discussions Surveys Interviews
Definition of key terms	**Policy**: Policy is a set of rules and procedures that ensure legal representation of the interests of citizens through representative democracy. It lays out the vision, goals, and objectives for leadership and governance. Policies may include decisions, guidelines, legislations, and regulations. The main policy actors are political parties and politicians, elected members of the Parliament and local government.
Further resources	Steel, B., List, P., Lach, D., & Shindler, B. (2004). The role of scientists in the environmental policy process: a case study from the American west. (link)

EGRN3: Increased frequency of environmental policy dialogues

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN3: Increased frequency of environmental policy dialogues***
Indicator level	Outcome
Purpose of indicator	Policy dialogues (PD) convene different stakeholder and expert groups around a environmental policy issue(s) in order to provide a check on the quality and contents of the policy brief, clarify judgments that are made in the policy brief, introduce relevant evidence, help to ensure that the contents of the policy brief are understandable and understood, help to ensure that the policy brief is taken into account and used in the development of a policy.
What the indicator measures	The indicator checks whether the frequency of environmental policy dialogues has increased compared to baseline (situation prior to intervention)
Data sources	Project and institutional records and documentation Stakeholders Meeting minutes from policy dialogues convened Stakeholders participating in policy dialogues Policies or programming discussed in policy dialogues
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Policy**: Policy is a set of rules and procedures that ensure legal representation of the interests of citizens through representative democracy. It lays out the vision, goals, and objectives for leadership and governance. Policies may include decisions, guidelines, legislations, and regulations. The main policy actors are political parties and politicians, elected members of the Parliament and local government. **Policy dialogue** is an open and inclusive dialogue on development policies. It forms part of policy and decision-making processes, where it is intended to contribute to developing or implementing a policy change following a round of evidence-based discussions/workshops/consultations on a particular subject. Policy dialogue take place around a policy question on which key documents and experts are brought together to present recent evidence on the issue.
Further resources	EU-Luxembourg-WHO Universal Health Coverage Partnership. (2015). Policy dialogue: What it is and how it can contribute to evidence-informed decision-making. Briefing Note. (link)

EGRN4: Number of alternative livelihoods options provided by the project and pursued by beneficiaries

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN4: Number of alternative livelihoods options provided by the project and pursued by beneficiaries***
Indicator level	Outcome
Purpose of indicator	Rapidly changing environmental, social and economic drivers, such as climate change, are threatening ecosystems, the services they provide and the livelihoods of those dependent on these services. Enhanced socio-economic sustainability will ensure that livelihood options are available in a changing environment, and can support dependent communities. It is a key to understand the ecosystem services that underpin livelihoods, and the relationships between climate and livelihood activities. This understanding can help identify the socio-economic conditions likely to influence the capacity of communities to take advantage of alternative livelihood activities.
What the indicator measures	The number (or volume in terms income/proportion of community that it sustains) of alternative livelihoods options provided by the project, which are pursued by beneficiaries at the time of evaluation, i.e. they are continuous permanent livelihood options.
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Livelihood** refers to their "means of securing the basic necessities -food, water, shelter and clothing- of life". Livelihood is defined as a set of activities, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments (both human and material) for meeting the requirements of the self and his/her household on a sustainable basis with dignity.
Further resources	Adeel, Z., & Safriel, U. (2008). Achieving sustainability by introducing alternative livelihoods. Sustainability Science, 3(1), 125-133. Mansfield, D., & Pain, A. (2005). Alternative livelihoods: substance or slogan? (link) – case study

EGRN5: Number of environment-related mechanisms and tools for which public input has been sought

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN5: Number of environment-related mechanisms and tools for which public input has been sought***
Indicator level	Outcome
Purpose of indicator	There is a growing call for greater public involvement in establishing science and technology policy, in line with democratic ideals. A variety of public participation procedures exist that aim to consult and involve the public, ranging from the public hearing to the consensus conference. Public participation has become to be seen as a vital part of addressing environmental problems and bringing about sustainable development. In this context the limits of solely relying on technocratic bureaucratic monopoly of decision making, and it is argued that public participation allows governments to adopt policies and enact laws that are relevant to communities and take into account their needs.
What the indicator measures	The indicator measures the number environment-related mechanisms and tools for which public input has been sought
Data sources	Project and institutional records and documentation Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Public participation** seeks and facilitates the involvement of those potentially affected by or interested in a decision. This can be in relation to individuals, governments, institutions, companies or any other entities that affect public interests. The principle of public participation holds that those who are affected by a decision have a right to be involved in the decision-making process. Public participation implies that the public's contribution will influence the decision
Further resources	Kellert, S. R., Mehta, J. N., Ebbin, S. A., & Lichtenfeld, L. L. (2000). Community natural resource management: promise, rhetoric, and reality. Society & Natural Resources, 13(8), 705-715. (link) Rowe, G., & Frewer, L. J. (2000). Public participation methods: a framework for evaluation. Science, technology, & human values, 25(1), 3-29. (link) Rowe, G., & Frewer, L. J. (2005). A typology of public engagement mechanisms. Science, Technology, & Human Values, 30(2), 251-290.

EGRN6: Number of active citizens engaged in local environmental observer networks or similar initiatives

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN6: Number of active citizens engaged in local environmental observer networks or similar initiatives***
Indicator level	Outcome
Purpose of indicator	Climate change is resulting in a range of impacts to environment and the health of animals and people. But systems for monitoring are limited. It is useful to have a system for sharing community information on environmental impacts and community health effects. Developing effective systems for accessing locally relevant information is a large part of this challenge. The system is a powerful tool for documenting local events and developing effective adaptation strategies for changing communities.
What the indicator measures	The number of active citizens engaged in local environmental observer networks or similar initiatives compared to baseline (situation prior the intervention).
Data sources	Project and institutional records and documentation Regional and national reports/legislation Relevant initiatives Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Active citizen** is a person who actively takes responsibility and initiative in areas of public concern **Local environmental observer network** is an organization of professionals who share information about environmental events where they live, post observations on public maps and coordinate with technical experts to identify appropriate actions.
Further resources	National Research Council, & National Weather Service Modernization Committee. (1998). Future of the national weather service cooperative observer network. National Academies Press. (link) Vaughan, H. et al. (2001). Monitoring long-term ecological changes through the ecological monitoring and assessment network: science-based and policy relevant. (link)

EGRN7: Number of jobs created in environmental sector

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN7: Number of jobs created in environmental sector***
Indicator level	Outcome
Purpose of indicator	It has often been argued that job creation is one of the important benefits of environmental green policies – that is, policies to foster economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.
What the indicator measures	The indicator measures the number of jobs created with financial or other support of the project during the project implementation phase
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Job** is a piece of work, especially a specific task done as part of the routines of one's occupation or for an agreed price.
Further resources	Forstater, M. (2006). Green jobs: Public service employment and environmental sustainability. Challenge, 49(4), 58-72. Kunapatarawong, R. & Martínez-Ros, E. Environmental innovation and its impact on employment (link)

EGRN8: Number of active CSOs in environmental sector

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN8: Number of active CSOs in environmental sector***
Indicator level	Outcome
Purpose of indicator	Civil society is a major source of social and political change and a valuable instrument. Actors of civil society can for instance include non-governmental organisations (NGOs), professional associations, social partners, universities or media representatives. They are usually close to local communities and can therefore play a crucial role in various missions dedicated to environmental protection, sustainable development, poverty alleviation, animal welfare, and other issues.
What the indicator measures	The number of civil society actors (measured as number of organizations and their type/focus or number of representatives from what type of organizations) who have been active in environmental sector with the support of the project.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Citizens, specific stakeholder groups Government representatives Citizen engagement outputs and tools (communication, events, reports etc.)
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	**Civil society organizations** are broadly understood as the diverse groups, NGOs and not-for-profit organizations that have a presence in public life and express the interests and values of their members or others, based on ethical, cultural, political, scientific, religious, or philanthropic considerations.
Further resources	Ghaus-Pasha, A. (2004). Role of Civil Society Organizations in Governance. (link)

EGRN9: Frequency and tone of reporting on environmental topics in media

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN9: Frequency and tone of reporting on environmental topics in media***
Indicator level	Outcome
Purpose of indicator	Attempts have been made to inform and sensitize people and governments about the environmental pollution. The core idea of these attempts was, and still is, that the more people are aware of the environmental problems and the correlated health risks, the more their motivation to overturn the situation and act with caution towards the environment, reduce their ecological footprint and adopt green technologies. The literature findings indicate that media, and especially digital ones, play an important role in the enhancement of environmental aware- ness and the establishment of a more ecological friendly way of living. Important factor is also the frequency of appearance in news and character of the environmental information.
What the indicator measures	The indicator measures the frequency of reporting on environmental topic in media compared to baseline (situation prior to intervention). If possible ascertain tone of reporting, if positive, negative or neutral.
Data sources	Project and institutional records and documentation Local and national media Websites, online newspapers etc. Relevant stakeholders
Methods of data collection	Desk research Media tracking, media content analysis Focus group discussions Surveys Interviews
Definition of key terms	The term **media** most commonly refer to newspapers, news agencies, television, radio, internet and graphic publications.
Further resources	Sypsas, A., Mallidis, N. T., Dromantiene, L., & Pange, J. (2013). The role of the media in the enhancement of environmental awareness. (link)

EGRN10: Change in budget envelope dedicated to environment in local or national budget

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN10: Change in budget envelope dedicated to environment in local or national budget***
Indicator level	Outcome
Purpose of indicator	The state of the environment is a major factor determining the quality of the life anywhere on the Earth and can be – in extreme cases – also reasons of massive outflow of the local inhabitants, if any place became inhabitable, e.g. due to extreme climate. Generally, bigger environmental budget could mean better environmental protection, but it could also mean more serious environmental damage necessary to resolve. However, the structure of the money spent on environment must be appropriate and extensive environmental monitoring is essential to approve, that the budget is spent properly and that it´s effect is long-term and sustainable.
What the indicator measures	The indicator measures the change in budget allocation compared to baseline (situation prior to intervention) in project related area.
Data sources	Project and institutional records and documentation Regional and national reports/legislation Municipal governments Stakeholders
Methods of data collection	Focus group discussions Surveys Interviews Desk research
Definition of key terms	Budget: an estimate of costs, revenues, and resources over a specified period, reflecting a reading of future financial conditions and goals. One of the most important administrative tools, a budget serves also as a (1) plan of action for achieving quantified objectives, (2) standard for measuring performance, and (3) device for coping with foreseeable adverse situations.
Further resources	Opschoor, J. B., & Vos, H. B. (1989). Economic instruments for environmental protection. Organization for Economic. Tietenberg, T. H. (1990). Economic instruments for environmental regulation. Oxford Review of Economic Policy, 6(1), 17-33. (link)

EGRN11: Public income generated from environmentally-focused economic instruments

Crosscutting theme	Environmental sustainability
Dimension	2. Environmental governance
Subdimension	2.1 Government commitments to environment and climate change
Indicator name	***EGRN11: Public income generated from environmentally-focused economic instruments***
Indicator level	Outcome
Purpose of indicator	There is a need to abandon the view that the environment is a "free asset" that can be used infinitely, but rather, treat the environment as a finite, precious asset that must be passed on to future generations. Based on this view, it is necessary to think of a way to sustain the advantage of the environment, and accept the concept of bearing the burden of preserving the earth and paying the price of using its resources. More concretely, around the world there are methods such as taxation, surcharges, emission permit trade, and deposit-refund systems that are already being carried out, reflecting an awareness of the need for consideration for the environment in the price of goods and services. This brings an extra amount of income into public budgets.
What the indicator measures	The amount of income generated from environmentally-focused economic instruments. It is expressed in absolute terms and can be compared to baseline (situation prior the intervention)
Data sources	Project and institutional records and documentation Municipal governments Budget documents, invoices, etc. Stakeholders
Methods of data collection	Interviews Desk research
Definition of key terms	**Economic Instruments** encompass a range of policy tools, from pollution taxes and marketable permits to deposit-refund systems and performance bonds. The common element of all economic instruments is that they effect change or influence behaviour through their impact on market signals
Further resources	Opschoor, J. B., & Vos, H. B. (1989). Economic instruments for environmental protection. Organization for Economic. Tietenberg, T. H. (1990). Economic instruments for environmental regulation. Oxford Review of Economic Policy, 6(1), 17-33. (link)