

SUSTAINABLE DEVELOPMENT GOALS IN ENVIRONMENTAL ASSESSMENT

State-of-the-art

2021



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Introduction

The potential for Sustainable Development Goals (SDGs) to help promote sustainable development within environmental assessment (EA) has been a popularizing discussion in recent years and has also resulted in an interest in seeing them integrated into various stages of EA by EA practitioners. Although few, international cases in which the SDGs have been integrated into EA reporting of projects and plans are emerging. The purpose of this report is to summarize a review performed in autumn 2020 that explored the current status of the SDGs within EA reports and thereby:

- Determine the current status of SDGs in EA: The reports give an indication of to what extent the SDGs are being used within the scoping and reporting stage of the EA.
- Strengthen the understanding of potential SDG functions: The function of the SDGs can vary depending on how they are integrated into the EA process, and in this case, more specifically EA reporting.
- Consolidate international experience: The review shows that there are international efforts that integrate SDGs, but initiatives to consolidate and compare these attempts across EA reports are absent.

The review consists of a total of 45 environmental assessment (EA) reports, exhibiting an integration of SDGs, albeit to varying degrees. Geographically, these reports are spread internationally, but cover only reports written in English, Danish, Swedish and Norwegian¹. This document has divided the reports based on the function that the SDGs perform. The methodology for how relevant SDGs are identified or how they are used in EA processes is not transparent nor does the review draw upon dialogues with those conducting the EAs. For this reason, the conclusions are solely interpretations based on how the SDGs are presented in reporting. This also means that the degree of influence that the SDGs may have had on project/plan development is not within the scope of this report.

This report is written in conjunction with the DREAMS project that seeks to promote progress on strengthening decision-support and the communication and assessment of impacts through the use of SDGs. The project aims to provide a systematic approach for the SDGs to influence project/plan development and the corresponding decision-making processes. This implies an integration that raises ambition levels and brings a deeper understanding of globally-binding sustainable development into EA practice. Details regarding the project and the tools for implementing SDGs can be accessed at www.dreamsproject.dk.

¹ The languages are restricted to the competencies of the researcher performing the review.

Summary

This report provides insight into the different ways in which the SDGs have been incorporated in current EA reporting practice and attempts to consolidate the international experience gained so far. It is based on a review of 45 reports that are geographically distributed as shown in Figure 2.1. There are 18 projects (4 scoping reports and 14 assessment reports) and 27 plans (6 scoping reports and 21 assessment reports).



Figure 2.1: Geographic distribution of the collected EA reports. (source: own figure).

This report can be seen as a catalogue of the different ways in which the SDGs are integrated into the various EA reports. This entails the visual cases withdrawn from a selection of the reports, the variation that can be seen between them, as well as an analysis of function.

The most significant findings are as follows:

- SDGs are widely merely mentioned in EA reports, without serving a clear function for the environmental assessment nor in shaping of the project/plan.
- A few cases show that SDGs can be used to sharpen the set of targets used to measure significance against, hereunder providing more precise and 'binding' targets.
- Several cases demonstrate how SDGs can be used as a framework for testing and visualizing the performance of a plan or a project. The review indicates, however, biases towards focusing on positive aspects.
- One case shows that testing performance against SDGs can lead to proposals of new mitigation measures and thereby better plans and projects.
- No cases integrate the SDGs in a way that entails SDG indicators and related data nor that considers how contributions to one SDG may impact another.

Types of SDG function within EA

The analysis of SDG function takes point of departure in the six-levels of integration proposed by Kørnøv et al. (2020). The six levels span from non-integration, in which the SDGs are present but do not serve a purpose in the EA, to radical integration, implying that the SDGs help to guide and transform the EA process. The six levels as well as the number of reports from the review that apply to each level are presented in Figure 3.1.

The reports apply to three of the six levels, namely SDG dropping, SDG scoping and SDG testing and the distribution of the reports between the levels can be seen in Figure 3.1. A list of the reports under each category is provided in Annex 1.



Figure 3.1: Conceptual framework outlining the six levels of SDG and EA integration (source: Kørnøv et al. 2020). The numerical distribution of the collected EA reports across these levels is also provided.

SDG dropping

A prominent function of the SDGs throughout the report is SDG dropping, which is seen throughout 25 of the 45 cases. Here, the SDGs are mentioned as a relevant policy or agenda for the project/plan to consider in its development, without further elaboration of what they may contribute to the EA process nor how they may be used within the project/plan. This is therefore considered to be the simplest form of SDG integration exhibited by the reports. This function is often a result of referring to the SDGs as a collective policy, rather than recognizing them as constituent goals that cover a wide array of sustainability topics with varying effect and relevance for a project/plan. However, in some cases, SDG dropping can occur even when a report addresses specific goals and targets.

In most cases of SDG dropping, a brief mention of the SDGs often occurs within a chapter in the EA regarding relevant policies and programs as is the case in the SEA for the Northern Periphery Arctic Programme in Figure 4.1 (Clement 2014), or in an introductory chapter to the project/plan, providing a summary or background information as shown in an EIA for a transmission line reinforcement in Figure 4.2 (World Bank 2017). The SEA for the Northern Periphery Arctic Programme in Figure 4.1 mentions the SDGs more broadly in terms of the conferences that establish universal sustainability agendas, while the EIA for the transmission line reinforcement project in Figure 4.2 mentions the SDGs more directly in relation to the project itself. This is a reoccurring variation between the and speaks to the context within which the SDGs are situated.

There is one instance in which the SDGs make an appearance in the EA through a hearing submission. Here there is a request that the SDGs be integrated into the Dublin Docklands Visitor Experience Development Plan (Fáilte Ireland 2020). The responsible authority has had the opportunity to respond to this submission and writes that the SDGs have been considered in preparation for the SEA. However, no further elaboration is made, and the links between SDGs and the plan remain undocumented. It is therefore possible that the SDGs have had a more prominent presence in SEA considerations, but this role is not made transparent in the SEA report. This example is shown in Figure 4.3.

SDG dropping is therefore a matter of recognizing the pertinence of the SDGs in relation to those projects and plans being assessed, but without transparency regarding how they have been used throughout the various stages of the EA process.



2.4 Relevant Environmental Strategies, Programmes and Policies

Rio+20 marked the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. Its objectives included securing renewed political commitment for sustainable development, and it resulted in a focused 'political outcome document' that contains practical measures for implementation. It also reaffirmed the need to achieve sustainable development by promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems. The Conference also adopted guidelines on green economy policies, and launched a process to develop a set of Sustainable Development Goals (SDGs) that build upon the Millennium Development Goals and converge with the post-2015 development agenda.

Figure 4.1: In the SEA report for the Northern Periphery Arctic Programme, the SDGs are mentioned in conjunction with UN Conference in a chapter about relevant environmental strategies, programmes and policies. (source: Clement 2014, p. 14).



Executive Summary

Introduction

Improving access to electricity has shown direct impact on poverty reduction through economic growth, enhancement of the delivery of social services and quality of life. Improving access to electricity to urban and rural population, meets the Ethiopian strategy for Sustainable Development and Poverty Reduction Program (SDPRP) and Sustainable Development Goal (SDG) of 2030.

Figure 4.2: The EIA mentions in the introduction that the Alamata-Combolcha II-Legetafo 230 KV transmission line reinforcement project meets SDGs, however, there is no further elaboration and the SDGs are not present in the remainder of the report. (source: World Bank 2017, p. 2).

SEA STATEMENT	Appe	endix I SEA Scoping Submissions and Responses	
FOR THE			
DUBLIN DOCKLANDS			
VISITOR EXPERIENCE DEVELOPMENT PLAN	No.	Submission Text	SEA Response
STRATEGIC ENVIRONMENTAL ASSESSMENT	16	State of the Environment Report – Ireland's Environment 2016 In preparing the Plan and SEA, the recommendations, key issues and challenges described within our most recent State of the Environment Report Ireland's Environment – An Assessment 2016 (<i>EPA, 2016</i>) should be considered, as relevant and appropriate to the Plan. Addressing and implementing the 7 key actions identified in the report, which are also linked to a number of the UN's Sustainable Development Goals, will be important in delivering environmental protection and promoting sustainable development in Ireland in the years ahead. Integrating these into the Plan will ensure that future tourism-related development is planned and managed within the context of	This report has been considered the preparation of this SEA Scop Report and will be kept on file reference throughout the S process, as relevant and appropri to the Plan.
Dublin 1 National Tourism Development Authority	17	the wider environmental protection and sustainable development agenda.	The UN Sustainable Developm
: CASE LIA Prive Priv		The Plan should be consistent with, and contribute to achieving, relevant UN Sustainable Development Goals (SDGs). Relevant targets and actions in Ireland's SDG Implementation Plan (DCCAE, 2018) should be integrated as appropriate into the Plan, with a view to ensuring that future tourism-related development is planned and managed within the context of the wider sustainable development agenda.	Goals (SDGs) and relevant targ and actions in Ireland's S Implementation Plan (DCCAE, 20 has been considered in preparation of this SEA Scop
			Report and will be kept on file reference throughout the S process, as relevant and appropri to the Plan

Figure 4.3: An excerpt from an SEA report for Dublin Docklands Visitor Experience Plan in which comments from the SEA scoping report along with SEA responses are attached as an annex. (source: Fáilte Ireland 2020, p. 18)

SDG-scoping

For SDG scoping, the EA reports demonstrate a more nuanced understanding of the SDGs in relation to the project/ plan. This covers, in its simplest form, using SDGs to define the framework for assessing significance and, through a more complex integration, using the SDGs to determine major issues that the project/plan attempts to mitigate. While it is possible to draw conclusions based on the content directly present in the report, an intransparent methodology makes it difficult, if not impossible, to conclude on the process that determines relevant SDGs. There are 7 cases of SDG scoping.

Using SDGs to define the framework for assessing significance is often present in scoping reports, introducing those SDGs that can be used as indicators for determining the significance of impacts in the upcoming assessment report. Nevertheless, SDG scoping is also present in assessment reports for both plans and projects in which the primary role of the SDGs is to define a framework for significant policies and programs. Due to the nature of an assessment report, then there are EA reports that, when including relevant SDGs, go on to assess how the project/plan stands in relation to fulfilling or having a negative impact on the goal. This function, however, is considered in greater detail in the following section, SDG testing.

There is variation in how the relevance of SDGs is indicated; in some instances, the SDGs are relevant according to the project/plan as a whole (see Figure 5.1), and in some instances, they are relevant according to selected EA parameters to be assessed (see Figure 5.2). There is also variation in whether the links between SDGs and the EA are made at the goal (Figure 5.2) or target (Figure 5.1) level.

Figure 5.1 is from a scoping report of Denmark's first maritime spatial plan in which it is determined that three SDGs, including a target for each, will be included in the planning process (Danish Maritime Authority 2020). Although specifying more directly on the target level, then there is no elaboration of how or why these precise SDGs and targets may be relevant for the plan.

Figure 5.2 is from an SEA of a National Marine Planning Framework in Ireland, however the SDGs appear in conjunction with the chapter on scoping environmental parameters. It shows that SDGs are used to support assessment criteria for topics to be considered in the SEA (Government of Ireland 2019). These SDGs, while on the goal level, are linked to the individual SEA topics for the plan and are thereby linked more directly to corresponding objectives and assessment criteria. The direct relation between the SDGs and the SEA topics as well as their influence on the assessment criteria is not elaborated. Figure 5.3 is from the same report in a chapter about relevant policies and shows another dimension of SDG inclusion, in which SDG 14 is linked more directly to the overarching plan, with a greater degree of precision as to how SDG 14 and corresponding targets are relevant for the plan (Government of Ireland 2019). This example implies particular attention to the problem-solving aspect of SDG integration, in which the SDGs can bring forth issues to which plans and project development can become partial solutions. As a whole, this report provides a more thorough demonstration of multidimensional integration, including considerations on both the link between the SDGs and problem identification as well as the link to environmental parameters for assessment.

Another scoping report for the Interreg Central Europe 2021-2027 Programme also links SDGs to the EA parameters being assessed within the SEA, however, here the SDGs are linked as sources for various policy objectives (Integra Consulting and Zavita 2020). The policy objectives and targets directly reference SDG indicators. In Figure 5.4, SDG 11 is cited as a policy commitment to reducing impact on human health, and more specifically, reducing particulate matter. This is an example of how the SDGs voluntarily become part of the mandatory consideration of how environmental protection objectives "have been taken into account during its [the plans] preparation" (SEA Directive, Annex I, item e). The SEA scoping report also specifies whether the objectives are according to legislative requirements or an aspirational objective that goes beyond legally binding commitments.

The planning process and SEA of a catchment plan shown in Figure 5.5 is interesting as it demonstrates how SDGs can be used to make sector interests understand each other and how SDGs can be prioritized in a participative process (Republic of Rwanda 2018). In this way, they have also contributed to developing common visions and objectives that guide the planning process. The alignment of interests across sectors took place during a scoping workshop that took point of departure in the SDGs.

<text></text>	4.2 Målsætninger der vil indgå i miljøvurderingen					
	FN's Verdensmål for bæredygtig udvikling	Mål 7: Bæredygtig energi, herunder delmål 7.3 hvorefter inden 2030 skal andelen af vedva- rende energi i det globale energimix øges væ- sentlig.				
		Mål 13: Klimaindsats, herunder delmål 13.2 om integrering af tiltag mod klimaforandringer i nationale politikker, strategier og planlægning.				
		Mål 14: Livet til havs, herunder delmål 14.2 om, at inden 2020, skal hav- og kystnære øko- systemer beskyttes og forvaltes bæredygtigt for at undgå større negativ indvirkning, bl.a. ved at styrke deres modstandskraft og ved at genoprette dem for at opnå sunde og produk- tive have.				

Figure 5.1: A scoping report for an SEA of Denmark's first maritime spatial plan, in which three SDGs are determined relevant to include in the SEA of the plan. The EA also breaks these SDGs into relevant targets. (source: Søfartsstyrelsen 2020, p. 34).

al Marine	SEA Topic	Key Relevant Considerations	SEA Objective		Assessment Criteria (to what extent will the policy)	*Relevant MSFD Descriptor	Releva SD
g Framework vironmental Report	Population	Quality of bathing waters;	To create an environment where every• individual and sector of society can play	•	Ensure bathing waters are not prevented from achieving excellent status as a result of the policies / actions in the NMPF	D3	Go
· · · · · ·	And Human Health (PHH)	Recreational uses of coastal and marine areas; Employment opportunities;	their part in achieving a more healthy Ireland.	•	Ensure the quality standards for water quality in shellfish water can be achieved	D9 D10	Go Goa
Strish 3 & *		Accessibility	•	•	Maintain or improve accessibility and connectivity for island and coastal communities.		
Sea i & A A			·	•	Promote access to the coastal and marine resource for tourism and recreation.		
1 Star			•	•	Complement and integrate with the NPF		
2005-	Biodiversity	Protection of migratory	To preserve, protect, maintain and,	•	Safeguard marine and coastal ecosystems and the marine environment	D1	Goa
Flora Fau (BF	Flora and Fauna	species; Control of invasive species:	where appropriate, enhance biodiversity, particularly EU designated	•	Avoid, minimise or mitigate disturbance impacts on mobile species, within or reliant on the marine area, resulting from new proposals and existing	D2	Goa
	(BFF)	Protection/ enhancement of	sites and protected species.		activities	D4 D6	
		protected habitats and species;	•	•	Safeguard space for the natural marine environment to enable continued provision of ecosystem goods and services and taking opportunities to enhance same	D8	
		conservation of marine ecosystems;	•	•	Contribute to achieving the objectives under the MSFD and the WFD		
		Ecosystem services	•	•	Maintain and protect marine protected areas and ensure integrity of the network is not impacted		

Figure 5.2: An SEA report for a National Marine Planning Framework for the Government of Ireland. Here the SDGs are used to support the relevance of SEA topics. (source: Government of Ireland 2019, p. 99).



Figure 5.3 An SEA report for the National Marine Planning Framework, whose plan purpose is centered around SDG 14 and corresponding targets. (source: Government of Ireland 2019, p. 37).

	3.1	AIR						
Consulting gr C	3.1.2	3.1.2 Relevant policy objectives						
STRATEGIC ENVIRONMENTAL ASSESSMENT OF INTERREG CENTRAL EUROPE 2021-2027		Issue	Policy objectives and targets	Target year	Sources	Category		
SCOPING REPORT June 2020		Impacts on human health and well-being	Attain limit values for sulphur dioxide (SO2), nitrogen dioxide (NO2), benzen (C6H6), carbon monoxide (CO), lead (Pb), and particulate matter (PM10 and PM2.5). Achieve target values for PM2.5, outdoor ozone (O3), arsenic (As), cadmium (Cd), Ni and benzo(a)pyrene (BaP); and the long-term objective for O3.	2020 and 2030	Ambient Air Quality Directive (EU, 2008) Clean Air Programme for Europe (EC, 2013a) SDG 11 Sustainable cities (UN, 2015a)	Legally binding commitment		
			By 2030, cut the health impacts of air pollution (in terms of premature mortality due to PM and O3) by 52 % compared with 2005.	2030	Clean Air Programme for Europe (EC, 2013a) SDG 11 Sustainable cities (UN, 2015a)	Aspirational objective		

Figure 5.4 Policy objectives outlined for the impacts identified in relation to the SEA scoping report for the Interreg Central Europe 2021-2027 Programme. Here the SDGs appear as indicator sources for policy objectives. (source: Integra Consulting and Zavita 2020, p. 18).



Catchment planning and alignment to SDGs

Matching different sectoral goals into one holistic catchment plan based on IWRM is a great challenge in water governance and the Catchment Task Force faced a steep learning curve before they could play a meaningful role as representative and advisory body at catchment level. The SDG framework was useful in this respect and was used in different stages of the catchment planning process to:

- Support understanding of the importance and interlinkages of water in the achievement of the 17 goals;
- Define the specific objectives for the catchment plan;
- Orient thinking in monitoring catchment plan implementation and define specific targets to be monitored.

Figure 5.5: SDGs are used to match sectoral goals into one plan involving prioritizing objectives in the SEA of the Sebeya Catchment Plan. (source: Republic of Rwanda 2018, p. 184).

SDG testing

A selection of the reports goes a step further than merely indicating relevant SDGs and tests how the project/plan performs according to those SDGs that have been deemed relevant. The 11 cases are all from assessment reports, but there is large variation in how SDG testing is expressed throughout as well as the level of detail that constitutes each assessment. It appears that the tests are overall assessments and are not based on a data analysis.

In its most basic form, SDG testing entails determining positive or negative impact on the relevant SDGs. Just as with SDG scoping, SDG testing can be seen both on goal (Figure 6.1) and target (Figure 6.2) levels. There is also variation in whether the report addresses both positive and negative impacts (Figure 6.2) or only those goals on which the project/plan has a positive influence (Figure 6.1).

An excerpt from an EIS for the Sydney Gateway Road Project as shown in Figure 6.1 delineates how the project is expected to contribute to seven goals (only three of which are shown in the Figure) (Roads and Maritime Services/ Sydney Airport Corporation 2019). The text provides a direct description of how the project is expected to have a positive influence on the overall goal and does not specify on target nor indicator levels. The text is from a chapter on relevant policies and plans consistent with the project.

On the other hand, the Swedish SEA for a municipal plan in Törebeda municipality has broken SDG 11 into its constituent targets and provides both a description of positive and negative influence, see Figure 6.2 (Ekologigruppen 2019). In the report, SDG 11 is not the only SDG evaluated, but it is the only SDG for which an evaluation on the target-level is made. Figure 6.3 shows how other SDGs are coupled to Sweden's national environmental goals (miljömål²) and thereby linked to corresponding positive and negative impacts. These considerations are found in a separate chapter at the end of the SEA titled Sustainability Goals (Hållbarhetsmål) (Ekologigruppen 2019).

Variation in the way the testing is displayed also emerge across EA reports. The EIS for the Sydney Gateway Road Project (Figure 6.1) has integrated the positive evaluations directly in the text of the report (Roads and Maritime Services/Sydney Airport Corporation 2019), while the SEA for Töreboda municipality (Figures 6.2 and 6.3) provides a more schematic approach (Ekologigruppen 2019). However, SDG testing also brings about several opportunities for other visual means, such as those shown in Figure 6.4 and 6.5. The visualization approach provides the benefit of 'visualizing' sustainability and increasing its transparency, whether by evaluating a certain project (Figure 6.5) or by comparing between alternatives (Figure 6.4).

However, a visualization intending to show how the project/plan performs according to the goals also requires being aware of how the visualization can be interpreted. The SDGs are in many cases often interpreted as being an indication of sustainability, and therefore, the results from SDG testing can be interpreted as a measurement for how sustainable the project/plan may be. As can be seen from the collected reports, there is a tendency to select SDGs to which the project has a positive impact, and fewer cases in which both positive and negative are assessed. With the exception of the SEA for Töreboda municipality (Figures 6.2 and 6.3) (Ekologigruppen 2019), then those cases in which negative impacts are considered, they are far fewer than the positive impacts also highlighted for the project/ plan. While it may be tempting to assume that this is a result of highly sustainable projects, then it is perhaps more likely a reflection of an overall tendency to use SDGs as indicators for positive sustainable contribution, and not necessarily as mechanisms for bringing attention to areas of improvement.

For this reason, the visualizations that result from SDG testing may make the project/plan appear more sustainable than it is. And if looking at Figure 6.5 from an EIA for Norra harbor in Malmø, then the way in which the positive impacts are visualized make them appear far greater than the negative impact on SDG 14, while reality may exhibit an entirely different picture (Sweco Environment AB 2020). Across the 11 reports under SDG testing, there is no example in which neither positive nor negative impacts have been weighted or determined more significant than another.

There is also limited transparency as to whether testing has provided new considerations for the project/planning process. Only one report, an EIA for staging of the 2026 FIFA World Cup in Canada, the United States, and Mexico (Figure 6.6), uses a consideration of project impact on the SDGs to develop new mitigation measures. Although not transparent, then these mitigation measures (Arup 2019). are presumably in response to identified negative impacts.

² In 1999, Sweden established their own national environmental goals and have become an integrated consideration in several Swedish EAs. The specific goals are written here: <u>https://www.sverigesmiljomal.se/miljomalen/</u>.



2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development was endorsed by the United Nations and the 193 Member States (including Australia) at the United Nations Sustainable Development Summit held in September 2015. The agenda, which responds to challenges faced by the world today and into the future, aims to integrate the social, environmental and economic dimensions of sustainable development. The agenda consists of 17 sustainable development goals and 169 targets.

The project would contribute to the following seven goals, shown in Figure 25.3:

- Goal 8: Decent work and economic growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The project would provide direct and indirect employment as well as contribute to the economic growth through direct procurement and better flow of people and freight
- Goal 9: Industry, innovation and infrastructure Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. Innovative sustainable technologies and resilience to climate change have been, and would continue to be key considerations in the design development
- Goal 11: Sustainable cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable. One of the key benefits of the project is that it would reduce heavy vehicles and cars on local roads, making the city more sustainable and safer for local communities

Figure 6.1: An EIS for the Sydney Gateway Road Project addresses goals that the project is expected to contribute to. Three of seven goals are shown. (source: Roads and Maritime Services/Sydney Airport Corporation 2019, p. 25.4).



Figure 6.2: An SEA for the municipal plan for Töreboda municipality that determines how the project performs according to targets for SDG 11. (source: Ekologigruppen 2019, p. 42).

1999	Tabell 3. Sammanfattane nationella och globala hål skärgård är inte med i tab	MKB ÖP Töreboda kommun samrådshandling		
	Miljömål	I miljömålets riktning	Motverkar miljömålet	Agenda 2030
	Begränsad klimatpåverkan	Bebyggelse i serviceorter, utveckling av kollektivtrafik. Hållbar energiproduktion.	Viss bebyggelse långt från kollektivtrafik.	13 Balt
Annual State of the State of th	Frisk luft	Utveckling av kollektivtrafik och gång- och cykelnät.	Viss bebyggelse långt från kollektivtrafik.	
: EXOLOGI	Ingen övergödning, Levande sjöar och vattendrag, Bara naturlig försurning	Förslag på utvecklad VA-plan.	Ingen uttalad strategi för läckage av näringsämnen från jordbruksmark.	6 annan 14 ann 15 mu

Figure 6.3: An SEA for the municipal plan for Töreboda municipality that links SDGs to Sweden's national environmental goals, and thereby to corresponding positive and negative evaluations. (Source: Ekologigruppen 2019, p. 41).



Figure 6.4: A sustainability assessment (SA) for the municipality of Sundbyberg in which the fulfillment of the goals is compared between the plan and its 0-alternative. (source: Sundbybergs stad, p. 23).



Figure 6.5: An EIA for the permit application for water related activities in Norra harbor in Malmø visually illustrates which SDGs will be positively and negatively influenced. (source: Sweco Environment AB 2020, p. 79).

	SDG	Target	EIA Topic	Proposed measures
	Good health and wellbeing	Strengthen the capacity of all countries, in particular developing countries, for early	Transport	Improved community health and wellbeing through facilitation of an increase in walking and cycling due to improved routes and facilities.
SIDDING MATIONS	(3)	national and global health risks.	Biodiversity	New green spaces will be developed which support improvements to health and wellbeing levels within urban areas.
	Clean water	Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to	Water	Development of a smart water grid, and implementation of smart metering.
EIA - Executive Summary	and sanitation			Implement design measures to reduce the volume of water required for heating and cooling systems.
	address water scarcity and substantially increasing recycling and safe reuse globally.			Implementing water efficiency measures and water recycling for pitch maintenance and irrigations, including retrofitting where appropriate. Stretch targets to consider could be achiving LEED (or equivalent) minimum requirements – e.g. zero irrigation or 30% reduction. 20% reduction in indoor water use through efficiency: installation of pobleb water meters.
				Specification of water efficient fixtures and fittings such as sanitary ware within new and refurbished stadium facilities.
				Investigating appropriate alternative sources of water such as cooling condensate, treated effluent, rainwater and grey water.
		Support and strengthen the participation of local communities in improving water and sanitation management.	Water	Develop opportunities to educate and raise awareness around water as a resource, and water scarcity as a risk, for example throu the promotion of mains water as an alternative to bottled.
	Affordable Clean Energy	Increase substantially the share of renewable energy in the global energy mix.	Carbon	Uptake use of renewable energy (e.g. install solar panels in stadiums, partner with renewable energy providers to power fan fest venues).
	(7)		Energy	Stadium energy to be provided from renewable sources where feasible with a preference for on-site renewables, such as solar pa or wind turbines.
		Double the global rate of improvement in	Carbon	Facilitate improvements to venues which reduce their energy consumption.
5 MARCH 2018		energy efficiency.		Reductions in building energy related carbon emissions through low carbon design for new buildings and retrofit of existing buildings in partnership with hotels and other accommodation providers.
			Energy	All stadiums will have energy management plans and energy efficiency programmes in place including building energy manage systems.

Figure 6.6: An EIA for the FIFA World Cup 2026 in which the SDGs and selected targets inform mitigation measures. (source: Arup 2019, p. 87).

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Annex 1

SDG dropping

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