



Sector: Industry



SDG-NDC Synchronization: Assessment and Recommendations

How can the Nationally Determined Contributions on Climate Change and the 2030 Agenda for Sustainable Development complement and support each other towards a sustainable future?

Ministry of Environment

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Assessment and Recommendations for Integration of Sustainable Development Goals within Lebanon's Climate Related Plans

Description and Objectives

The Paris Climate Agreement's Nationally Determined Contribution (NDC) and the Sustainable Development Goals (SDGs) share some mutual goals and a common target year (2030). Many synergies exist between the two agendas and addressing those linkages from an integrated institutional viewpoint will enhance the implementation, coordination and tracking of the different actions. The aim of this analysis is to assist policymakers in:

- Assessing the sectoral policies that make up the NDC in terms of SDG linkages using the SDG Climate Action Nexus tool (SCAN tool) in order to establish and clarify the linkages;
- Identifying progress indicators of NDC policies to inform SDG progress and vice versa, in order to synchronize reporting;
- Operationalizing the coordination between institutions responsible for the implementation and reporting of both the NDC and SDGs.

Methodology

- The SCAN-tool provides high-level guidance on how climate actions can impact the achievement of the SDGs (http://ambitiontoaction.net/scan_tool/);
- Coupled with local expertise, this analysis:
 - Identifies potential linkages between specific recommendations included in each of Lebanon's climate related plans and policies and the SDGs;
 - Includes the identification of a primary SDG linkage along with other relevant SDG linkages;
 - Identifies potential linkages to all of the SDG targets, and provides further recommendations.
- All climate-relevant and sustainable development plans inherently contribute to SDG 13 (climate action);
- SDG 17 addresses global partnerships and means of implementation, relevant SDG 17 linkages to local plans are also identified in this assessment.

This is not an exhaustive analysis but it provides a sound basis to better understand where and how Lebanon's climate actions impact SDG achievement.

How to use this guide?

Step 1: Review

This guidance recommends certain linkages per SDG which should be reviewed in the context of policy-making.

Step 2: Prioritize

Not all the linkages made have the same relevance to the policy or activity, therefore, the linkages should be prioritized considering magnitude of impact, co-benefits and other criteria depending on the institution and its priorities.

Step 3: Consult

Depending on the prioritized SDGs, stakeholder consultations for policy-drafting should include the lead institutions responsible for implementing the selected SDGs.

Step 4: Synchronize

When implementing the policy, synchronization at the level of tracking between the different institutions, the NDC committee and the SDG committee should be considered.

Sector:	Industry
Sub-sector:	N/A
Source document:	Lebanon Industry 2025: The integrated vision for Lebanese Industrial Sector (2015)
Ministry:	Ministry for Industry
URL:	Industry Vision 2025 http://www.industry.gov.lb/getattachment/PublicationsAndStudies/vision-(1).pdf?lang=en-US
	Summary of initiatives and policies launched by the Ministry of Industry over the past two years and future initiatives aimed at achieving the Sustainable Development Goals (SDGs) of 2030 Agenda: http://www.industry.gov.lb/getattachment/PublicationsAndStudies/SDG-Gov-report-en.pdf?lang=en-US

Plan/ Policy Overview

The Industry Vision 2025 is a high-level strategy comprised of seven objectives aimed at ‘Conducting the Lebanese industrial sector and contributing to its empowerment, activation, protection and development’. The fifth objective focuses solely on green industry ‘Green Economy: Energy- renewable and efficiency’ and therefore relevant to both Lebanon’s climate change efforts and the SDGs. This plan is not explicit about alignments with the SDGs, however, the plan primarily aligns with SDG 9 Industry, Infrastructure and Innovation. Other SDGs that are highly relevant especially in the context of addressing climate change include: SDG 12- Sustainable Production and Consumption, SDG 17 Partnerships for the Goals, SDG 7- Clean and Affordable Energy, and SDG 11- Sustainable Cities and Communities. The plan makes no direct mention of climate change or the NDC. The 2025 vision was accompanied by an executive strategic plan (2016-2020) and an operational plan for the year 2016-2017. The Ministry of Industry has started implementing its executive and strategic plan since 2016. Further, the Ministry of Industry published, “Summary of initiatives and policies launched by the Ministry of Industry over the past two years and future initiatives aimed at achieving the Sustainable Development Goals (SDGs) of 2030 Agenda” which describes that the objectives of the strategic plan are aimed at implementing Sustainable Development Goals 1, 3, 7, 9, 11, 12, 17, but it does not provide concise narrative as to where or how these linkages exist within each activity.

Links to Climate Change and Sustainable Development

The Vision for Industry addresses climate issues through its green industry initiatives. Specifically, the plan calls for the following measures which will directly reduce greenhouse gas emissions:

- Use of renewable and alternative energy and encourage increasing energy efficiency;
- Encourage recycling;
- Urge industrial enterprises to obtain ISO 14000 certification environmental management and ISO 26000 on Social responsibility;
- Collaborate with Ministry of Environment to help industries becoming eco-friendly;
- Promote the use of green and energy saving buildings.

In Lebanon's Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, mitigation targets include energy efficiency and renewable energy targets. The NDC does not address specific sectoral targets, however, where the NDC mentions the energy sector, this covers power and fuel consumption in all sectors, including industry, households, agriculture, etc.

<i>Unconditional Target</i>	A GHG emission reduction of 15% compared to the Business-As-Usual (BAU) scenario in 2030.
	A 3% reduction in power and heat demand through energy-efficiency measures in 2030 compared to the demand under the BAU scenario
	15% of the power and heat demand in 2030 is generated by renewable energy sources.
<i>Conditional Target</i>	A GHG emission reduction of 30% compared to the BAU scenario in 2030.
	20% of the power and heat demand in 2030 is generated by renewable energy sources.
	A 10% reduction in power demand through energy-efficiency in 2030 compared to the demand under the BAU scenario

The following assessment identifies the linkages between the specific actions in the Industry Vision 2025 to the SDG targets (Table 1 and 2). It identifies, how efficient production for example, can positively or negatively impact SDG targets.

Table 1: Primary SDG Target






Relevant SDG	How does the Industry Vision contribute to this SDG? (examples)
	<ul style="list-style-type: none"> - Uptake of low emissions energy technologies in industry (e.g. concentrated solar thermal) supports development of sustainable and reliable infrastructure - Supports upgrading and retrofitting of industries, increased resource efficiency, and adoption of environmentally sound technologies through more efficient (industrial) buildings and appliances - Recycling contributes to achieve increased resource-use efficiency

Table 2: Highly Relevant SDG Targets

Relevant SDG	How does the Industry Vision contribute to this SDG? (examples)
	<ul style="list-style-type: none"> - Uptake of low emissions energy technologies in industry (e.g. solar thermal) increases access to modern energy services - Energy efficiency measures decreases energy poverty due to improved energy affordability, increases energy security due to decreased imports and greater reliability, and improves access to modern and sustainable energy services - Environmental management certifications can support an increased share of renewables in the mix
	<ul style="list-style-type: none"> - Low emission energy technologies (e.g. concentrated solar thermal) in industry reduces the impact of industrial activity in cities - Improving energy efficiency in industry reduces the impact of cities (through reduced pollution from industry within city areas) - Improved material efficiency in design and processes and more durable, longer lasting products helps reduce the impact of cities (which include industrial activity)
	<ul style="list-style-type: none"> - Supporting improved energy efficiency in industrial processes supports adoption of sustainable practices by companies - Supporting development of low carbon energy sources for industry supports adoption of sustainable practices by companies - Reduces environmental impact of waste through encouraging companies to recycle - Material efficiency and improved product design supports sustainable chemical and waste management and reduced pollution
	<ul style="list-style-type: none"> - Policy coherence is created through legislation, policies and regulations that support greener industries - Industrial cooperation agreements that support the promotion of green industries through international agreements

Summary of Recommendations

The next version of the Industry Vision (or update, or amendment) should explicitly address linkages to specific SDG targets, and the NDC goals. In doing so, there should be narrative that focuses on the plan's broader societal goals and impact on addressing climate change. The Industry Vision's green objectives positively impact at least twenty-six SDG targets and advances the NDC goals in reducing GHG emissions,

and it should therefore be demonstrated in the plan so that common entry points can be better understood within and among Lebanon's sustainable development related plans and policies.

- For example, according to the Vision, the share of the final energy consumption of the industrial sector registered around 14% in 2010. The Industry Vision, however, does not address how the plan's objectives are a means to reduce GHG emissions. Future iterations of the Vision could address how the plan's green energy strategies could directly reduce industries' share of GHG emissions, and aid in providing a more reliable energy sector through the deployment of renewables and energy efficiency (SDG 7).
- Due to the intermittent electricity supplied by EDL and the constant power shortages, most industries in Lebanon generate their own energy from in-house generators. It is assumed that the gap between public electricity supply and demand in Lebanon is being met at 80%, by manufacturing industries (in addition to community-based generators and commercial institutions' generators) (MOE, 2015). Energy efficiency and the deployment of renewables which can reduce the reliance on generators, can significantly reduce the impact of industry on cities (SDG 11) emissions, thereby reducing premature deaths from air pollutants (SDG 3).
- Further, the plan could mention education as a key objective in accomplishing the green industry objective. Currently the Industry Vision comprises many 'tools' aimed at education and awareness raising, increasing scientific education, as well as encouraging ISO certifications. Therefore, linkages to SDG 4 which centers on education and SDG 12 sustainable consumption and production, could be central in the green industry narrative.
- The Industry Vision also includes steps where the Ministry of Industry would collaborate with the Ministry of Environment and pass laws to facilitate industries becoming eco-friendly. This demonstrates linkages with enhancing policy coherence (SDG 17), and developing more effective, accountable, and transparent institutions (SDG 16) which could be clearly articulated in future iterations of the Vision.

Future iterations of the Industry Vision should consider the potential impact on SDG targets and in addressing climate change when developing and prioritizing specific implementation strategies. For example, the plan should prioritize measures that are most economically feasible and have largest impact on both the NDC and SDGs. In other words, there are opportunities in portraying the green industry vision through a more holistic approach: looking through the lens of the SDGs and NDC might result in a different prioritization of plan strategies.

- For example, looking at renewable technologies from a health and well-being perspective might result in prioritized initiatives that have the greatest impact on decreasing respiratory illness (considering both indoor and outdoor pollutants).
- Further, key indicators for industry should be developed and synthesized with other plans and policies, to include a broader assessment of meeting SDG targets and NDC goals. All recommendations within in the Industry Vision should be measured against SDG and NDC objectives. For example, measures to increase industrial exports should be weighed against environmental impact as well as SDG goals.

- The SDG and NDC committees should work collaboratively, alongside the responsible ministries, in the development of joint indicators that can be utilized among all sustainable development related plans and policies to jointly assess both NDC and SDG progress.

Potential Negative Linkages

The majority of green industry measures result in largely positive benefits to the environment however, a few measures can have negative or unintended consequences. The overall impact and potential trade-offs need to be weighed to determine if projects have a net positive impact and/or if potential negative impacts can be avoided. Moreover, some negative linkages may not be detrimental specifically to the environment, but they can have negative consequences on other SDGs such as hunger, poverty, health or jobs. Therefore, it is imperative to understand how certain plan recommendations may negatively impact some SDGs. Table 3 illustrates some examples of the potential negative linkages that the deployment of energy efficiency could have on the SDGs.

Table 3: Potential Negative Linkages to SDGs

11.4 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Increased air pollution from industrial use of biomass - e.g. switching from gas boilers to biomass has negative impact on local air pollution
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Increases air pollution from biomass - e.g. switching from gas boilers to biomass has negative impact on local air pollution

Sustainable Development Anchors: what is there and what is missing?

A key word search and review of the Industry Vision identifies where the plan explicitly addresses components of sustainable development and climate change. While the SCAN tool identified where linkages exist between plans and the SDG targets, further examination of each plan reveals where these linkages are explicitly stated in each plan. For example, energy efficiency measures have strong linkages to responsible consumption and production (SDG 8) but these linkages are not included as part of the Industry Vision narrative. Likewise, renewable energy plays a central role in the Industry Vision, however, the narrative does not place it in the context of sustainable development.

The following is an assessment of sustainable development and climate change language included the Industry Vision and recommendations for creating linkages in future iterations of the plan. The below recommendations tackle primary SDG, the other highly relevant SDG linkages, as well as any additional SDG linkages.

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
SDG One: No Poverty <ul style="list-style-type: none"> · Low-income · Poor · Poverty · Disadvantaged · Underprivileged · Vulnerable groups · Rural communities 	Poverty is not addressed in the Industry Vision.	No recommendations.
SDG Two: Zero Hunger <ul style="list-style-type: none"> · Hunger · Food access · Food security · Food affordability · Agricultural Productivity 	Hunger is not addressed in the Industry Vision.	No recommendations.
SDG Three: Good Health and Well-being <ul style="list-style-type: none"> · Environment · Health · Pollution 	Health or well-being are not addressed in the Industry Vision but environmental protection is mentioned as a key objective.	<ul style="list-style-type: none"> - Increased energy efficiency reduces air and water pollution; - A fuel switch reduces air and water pollution from fossil fuel use; - Certification in environmental management can support the reduction in air pollution and water pollution due to avoided deposition and/or leakage of pollutants and reduces soil pollution due to avoided deposition and/or leakage of pollutants; - Energy efficient buildings reduce air pollution and improves mental health and well-being due to decreased urban heat island effect.
SDG Four: Quality Education <ul style="list-style-type: none"> · Education · Awareness raising · Youth 	<p>Education and awareness play a central role in the Industry Vision's objectives:</p> <ul style="list-style-type: none"> - Spread the culture of energy conservation and use of alternative energies (workshops, seminars, trainings, media, advertising, ...); - Participate in the environmental awareness of industrial enterprises (workshops, seminars, training sessions...); - Participate in scientific industrial researches to establish and promote the concept of green industry; - Urge industrial enterprises to obtain ISO 14000 certification environmental management and ISO 26000 on Social responsibility. 	<ul style="list-style-type: none"> - Green certification can help to ensure all industries are educated and aware about energy conservation and environmental awareness; - Awareness campaigns can spread a culture of environmental awareness and promote green industry.

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
SDG Five: Gender Equality <ul style="list-style-type: none"> · Women · Gender 	Gender is not addressed in the Industry Vision.	No recommendations.
SDG Six: Clean Water Sanitation <ul style="list-style-type: none"> · Clean water · Drinking water · Wastewater · Water quality 	Water or sanitation are not addressed in the Industry Vision.	<ul style="list-style-type: none"> - Energy efficiency reduces water pollution (thermal); - Moving to low emissions technologies (e.g. solar thermal) can reduce water use from power generation; - Improves conservation of water ecosystems through reduced water consumption from power generation; - Reduces the amount of waste and garbage produced by increasing recycling and safe reuse.
Highly Relevant SDG SDG Seven: Affordable & Clean Energy <ul style="list-style-type: none"> · Energy efficiency · Electricity transmission · Electricity distribution · Reliable energy · Affordable energy · GHG reduction · Mitigation · Energy security 	<p>The Industry Vision's fifth objective, Encourage Green Industry, focuses primarily on promoting renewable and clean energy, and increasing energy efficiency within the industrial sector:</p> <ul style="list-style-type: none"> - Use of renewable and alternative energy and encourage increasing energy efficiency; - Promote the use of green and energy saving buildings; - Collaborate with Ministry of Environment to help industries becoming eco-friendly; - Urge industrial enterprises to obtain ISO 14000 certification environmental management and ISO 26000 on Social responsibility. 	<p>In addition to SDG 7 in Table 2:</p> <ul style="list-style-type: none"> - Private sector collaboration can support the increase of the share of renewables in the energy mix; - Private sector collaboration can support improved industrial energy efficiency; - Promoting the use of green and energy saving buildings can support a decrease in GHG emissions in the industrial sector; - International cooperation to benefit from foreign experiences through the provision of agreements, scientific cooperation and exchange of experiences (from Plan); - Reduces water pollution (deposition/leakage) from process and material efficiency and reduced product demand.
SDG Eight: Decent Work and Economic Growth <ul style="list-style-type: none"> · Jobs · Income · Employment 	<p>The Industrial Vision's ultimate objective is to support economic development and job creation. The plan's overall vision reinforces the ambition to develop the industrial sector in a sustainable way. "Vision: Industry that contributes effectively and consistently to the achievement of sustainable development". Several other strategic objectives reinforce the economic development objectives including:</p>	<ul style="list-style-type: none"> - Increases economic productivity, contributes to technological and infrastructure upgrading, and supports economic diversification and innovation; - Contributes to technological and infrastructure upgrading, and to economic diversification and innovation;

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
	<ul style="list-style-type: none"> - Strive to lead the Lebanese society into becoming a highly productive and active industrial society; - Achieve national economic development and raise living standards; - Contribute in reducing trade deficit; - Increase Job opportunities steadily; - Strive to raise productive capacity of the national industry to be able to provide 50% to 70% of local consumption needs of various sectors; - Increase the contribution of the industrial sector to gross domestic product (GDP) to 18%. 	<ul style="list-style-type: none"> - Industrial energy efficiency programmes can support entrepreneurship, job creation and Micro, Small and Medium Enterprises (MSME) formation; - Increases resource efficiency and contributes to decoupling growth from environmental degradation; - Move to renewable fuels for industrial heat (concentrated solar, biomass) can improve resource efficiency and reduce environmental degradation; - Supports decent job creation through new opportunities to help companies improve industrial process efficiency; - Actions to increase recycling can contribute to formalize the sector and create decent jobs.
<p><u>Primary SDG</u></p> <p>SDG 9: Industry, Innovation, Infrastructure</p> <ul style="list-style-type: none"> · Industry · Innovation · Infrastructure · Research and development 	<p>The Industry Vision 2020 is primarily focused on supporting industry and innovation with a strong emphasis on research.</p> <ul style="list-style-type: none"> - Mission: Conducting the Lebanese industrial sector and contributing to its empowerment, activation, protection and development; - Vision: Industry that contributes effectively and consistently to the achievement of sustainable development; - Encourage innovation and research by assisting with financial, practical and human resources; - Support sectors pursuing technological progress; - Foster industrial innovations; - Develop and constantly improve laws that encourage innovation; - Participate in scientific industrial researches to establish and promote the concept of green industry. 	<p>In addition to SDG 9 in Table 1:</p> <ul style="list-style-type: none"> - Supports sustainable industrialization through creation of demand for more energy efficient construction methods and building products; - Supports development of sustainable and resilient infrastructure and supports human well-being (better quality living environments); - Supports R&D and upgrading of industrial capabilities by creating demand for new energy efficient building methods and materials and energy efficient technologies; - Environmental certification can support sustainable industrialization and could improve industrial productivity and profitability.

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
SDG 10: Reduced Inequalities <ul style="list-style-type: none"> Equity Inclusion 	Equity or inclusion are not addressed in the Industry Vision.	No recommendations.
Highly Relevant SDG SDG 11: Sustainable Cities and Communities <ul style="list-style-type: none"> Cities Communities Urban Urbanization Fuel efficient vehicles Modal share shift Public transportation Accessibility Mobility 	<p>Cities and communities are not addressed in the Industry Vision.</p> <p>Transportation is mentioned in reference to decreasing transit costs for exports.</p>	<p>In addition to SDG 11 in Table 2:</p> <ul style="list-style-type: none"> Energy efficiency supports sustainable use of resources; Recycling reduces environmental impact of cities through waste management; Improved material efficiency in industry supports sustainable urbanization; Energy efficient buildings reduces impact of cities through more efficient energy use and reduced pollution (from energy generation/consumption).
Highly Relevant SDG SDG 12: Sustainable consumption and production <ul style="list-style-type: none"> Consumption Production Output Productivity Efficiency 	<ul style="list-style-type: none"> The Vision for Industry's overall vision: Industry that contributes effectively and consistently to the achievement of sustainable development; Strategic objective: Preserve and protect the environment. 	<p>In addition to SDG 12 in the Table 2:</p> <ul style="list-style-type: none"> Improved energy efficiency reduces air pollution; Reduced air pollution from displaced fossil fuel combustion; Contributes to reduce waste generation through prevention, reduction, recycling and reuse; Energy efficiency supports sustainable use of resources; Renewable energy technologies for industrial heat supports sustainable resource use; Certification in environmental management can support resource efficiency and supports prevention, reuse and recycling (e.g. from material efficiency in process and product design); Increases resource efficiency through more energy efficient buildings and appliances; Can support companies to adopt sustainable practices e.g. through energy efficiency retrofit schemes.

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
SDG 13: Climate Change <ul style="list-style-type: none"> Climate Change GHG emissions Resilience Mitigation Adaptation Nationally Determined Contribution (NDC) 	<p>Climate change is not directly addressed in the plan but environmental protection is a key objective:</p> <ul style="list-style-type: none"> Preserve and protect the environment. Collaborate with Banque du Liban and financial institutions (KAFALAT), organizations specialized national entities (IDAL) and foreign entities (World Bank, European Bank), to find incentives for financing the industrial sector in particular in the proper industrial fields (industrial zones, alternative energy, clean environment, development and specialized researches). 	<ul style="list-style-type: none"> Reference how the Industry Vision contributes to climate change mitigation and adaptation; Reference role of industry policy in the NDC; Align policy targets with the NDC.
SDG 14: Life Below Water <ul style="list-style-type: none"> Water Sea Lakes Streams Rivers Mediterranean Marine life Run-off Water pollution Coastal 	<p>Impact on life below water is not addressed in the Industry Vision.</p>	<ul style="list-style-type: none"> Greener industry contributes to reduced outdoor air pollution and reduces water pollution (run-off); improves conservation of water ecosystems through reduced water consumption from power generation; Reduces the amount of waste and garbage produced by increasing recycling and safe reuse.
SDG 15: Life on land <ul style="list-style-type: none"> Ecosystems Biodiversity Forests Reforestation/ afforestation Seed bank Genetic 	<p>Impact on life on land is not addressed in the Industry Vision.</p>	<p>Protects natural habitats through improved resource efficiency and reduced pollution.</p>
SDG 16: Peace, Justice & Strong institutions <ul style="list-style-type: none"> Capacity Legislation Regulation Legal framework Policy Participatory 	<ul style="list-style-type: none"> Much of the Industry vision, including within the green industry objectives, centers on building an effective institution through institutional development and enacting sound policy frameworks; Build up an effective, dynamic, and developed Ministry of Industry capable of conducting and leading the industrial sector towards sustained prosperity; 	<p>Legislation, policies and regulation that support the development of greener industries.</p>

Table 4: Recommendation for Estimation of Impact of SDGs

Key Words	Description in the Policy/Strategy/Action Plan	Recommendation for Estimation of Impact/Integration of Impact
<ul style="list-style-type: none"> Inclusive (decision-making) 	<ul style="list-style-type: none"> Upgrading Ministry of Industry establishment law and decrees pertaining to its structure, functions and related implementation decrees; Work on passing the draft law submitted by the Ministry of Environment to amend article 5-bis and article 7 of the Income Tax Law; Enforce the concept of green industry gradually as one of the ministry's conditions for granting services to industrialists operating in Lebanon starting with industrial licensing. 	
<p><u>Highly Relevant SDG</u></p> <p>SDG 17: Partnerships for the Goals</p> <ul style="list-style-type: none"> Resource Financing mechanism Public-Private Partnerships 	<p>The Industry Vision touches on SDG 17 in several places mostly as it pertains to public- private and international partnerships and mobilizing financial resources:</p> <ul style="list-style-type: none"> Adopt the model of industrial cooperation agreement that includes promotion of green industries in the international agreements; Work with various banking and financial entities to provide soft loans for industries and environment eco-friendly buildings; Seek to benefit from international grants specialized for the preservation of environment and alternative energies. 	<p>In addition to SDG 17 in Table 2:</p> <ul style="list-style-type: none"> Mobilization of financial resources that support greener industries; Private sector collaboration with the Ministry of Environment can assist in the creation of a greener industry.

Annex I: Lead Institution per SDG in Lebanon

Theme: People		Leading Institution: Ministry of Education and Higher Education			
1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	10 REDUCED INEQUALITIES
					

Theme: Planet		Leading Institution: Ministry of Environment			
6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND
					

Theme: Prosperity		Leading Institution: Ministry of Economy and Trade			
8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	11 SUSTAINABLE CITIES AND COMMUNITIES			
					

Theme: Peace		Leading Institution: Office of the Minister of State for Administrative Reform			
16 PEACE, JUSTICE AND STRONG INSTITUTIONS					
					

Theme: Data and Statistics		Leading Institution: Central Administration of Statistics			
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Cross-cutting theme:					
17 PARTNERSHIPS FOR THE GOALS					
					

Annex II: Indicators


A cohesive and integrated indicator framework that synchronizes SDG and NDC progress is essential for coordinated implementation and joint progress assessment. Lebanon has yet to nationalize the SDG indicators which provides an opportunity to include climate focused indicators into the nationalized approach so that both agendas can be assessed through a mutual set of indicators.

The absence of nationalized SDG indicators withstanding, a robust database of national level data can be found through the SDG API database. The database provides data from global sources at the national level that correspond to the Global SDG Indicator Framework, making comparisons of SDG progress across countries easily accessible and consistent. In addition to utilization of the SDG global indicator framework, additional indicators are needed to effectively and cohesively monitor both agendas. As part of this research, identification of the targets, goals, data points and/or indicators within the NDC, Third National Communication and within specific plans and policies that comprise Lebanon's NDC were identified to further provide a basis for developing an integrated indicator framework. The final product should be a combined list of indicators that incorporates the SDG global framework complemented by additional indicators that are climate focused, and germane to the goals of the specific plan/policy.

Annex II, Table 1



SDG	Indicator
9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	9.2.1: Manufacturing value added as a proportion of GDP (percent)
	9.2.1: Manufacturing value added per capita (constant 2010 United States dollars)
	9.2.2: Manufacturing employment as a proportion of total employment (percent)
	Other potential indicators: GHG emissions from Industry Industrial waste recycling % Heavy Industry as share of GDP Industrial So2 discharge
SDG	Indicator
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1: Carbon dioxide emissions per unit of GDP (kilogrammes of CO2 per constant 2010 United States dollars)
	9.4.1: Carbon dioxide emissions per unit of manufacturing value added (kilogrammes of CO2 per constant 2010 United States dollars)
	9.4.1: Carbon dioxide emissions from fuel combustion (millions of tonnes)
	Other potential indicators: Number of Industrial Companies with ISO 14001 Certification Number of Industrial Companies with ISO 26000 Certification Amount in \$\$ in loans provided for industrial building retrofits Amount in \$\$ in grants provided to industrial companies for green industry initiatives

Annex III: SDG List

PEOPLE	 <p>Goal 1. End poverty in all its forms everywhere</p>	1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
		1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
		1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
		1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
		1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
		1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions
		1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions
PEOPLE	 <p>Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p>	2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
		2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
		2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
		2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
		2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
		2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
		2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round
		2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

PEOPLE	<div>3 GOOD HEALTH AND WELL-BEING</div>  <div>Goal 3. Ensure healthy lives and promote well-being for all at all ages</div>	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
		3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
		3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
		3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
		3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
		3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents
		3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
		3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
		3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
		3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
		3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
		3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
		3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
PEOPLE	<div>4 QUALITY EDUCATION</div>  <div>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</div>	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
		4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
		4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
		4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
		4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
		4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
		4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
		4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
		4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
		4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

PEOPLE	<p>5 GENDER EQUALITY</p>  <p>Goal 5. Achieve gender equality and empower all women and girls</p>	5.1 End all forms of discrimination against all women and girls everywhere
		5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
		5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
		5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
		5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
		5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
		5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
		5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
		5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels
PEOPLE	<p>10 REDUCED INEQUALITIES</p>  <p>Goal 10. Reduce inequality within and among countries</p>	10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average of the population at a rate higher than the national average
		10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
		10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard
		10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
		10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
		10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions
		10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
		10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
		10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes
		10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent

PLANET	<div> <div>6</div> <div>CLEAN WATER AND SANITATION</div> <div>  </div> </div> <div> Goal 6. Ensure availability and sustainable management of water and sanitation for all </div>	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all
		6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
		6.3 By 2030, improve 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
		6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
		6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
		6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
		6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
		6.b Support and strengthen the participation of local communities in improving water and sanitation management
PLANET	<div> <div>7</div> <div>AFFORDABLE AND CLEAN ENERGY</div> <div>  </div> </div> <div> Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all </div>	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
		7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
		7.3 By 2030, double the global rate of improvement in energy efficiency
		7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
		7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support

PLANET	<div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div> <div></div> <div>Goal 12. Ensure sustainable consumption and production patterns</div>	12.1 Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
		12.2 By 2030, achieve the sustainable management and efficient use of natural resources
		12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
		12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
		12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
		12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
		12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities
		12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
		12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
		12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
		12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities
		PLANET
13.2 Integrate climate change measures into national policies, strategies and planning		
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning		
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible		
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities		

PLANET	 <p>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p>	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
		14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
		14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
		14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
		14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
		14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
		14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
		14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
		14.b Provide access for small-scale artisanal fishers to marine resources and markets
		14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want
PLANET	 <p>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
		15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
		15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
		15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
		15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
		15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
		15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
		15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
		15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
		15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
		15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
		15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

PROSPERITY	8 DECENT WORK AND ECONOMIC GROWTH  Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
		8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
		8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
		8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
		8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
		8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training
		8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
		8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
		8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products
		8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
		8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries
PROSPERITY	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE  Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
		9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
		9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
		9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
		9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
		9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
		9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
		9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

PROSPERITY	<div>11 SUSTAINABLE CITIES AND COMMUNITIES</div>  <div> Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable </div>	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
		11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
		11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
		11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage
		11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
		11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
		11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities
		11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
		11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels
		11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials
PEACE	<div>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</div>  <div> Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels </div>	16.1 Significantly reduce all forms of violence and related death rates everywhere
		16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children
		16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all
		16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
		16.5 Substantially reduce corruption and bribery in all their forms
		16.6 Develop effective, accountable and transparent institutions at all levels
		16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels
		16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance
		16.9 By 2030, provide legal identity for all, including birth registration
		16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
		16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence & combat terrorism & crime
		16.b Promote and enforce non-discriminatory laws and policies for sustainable development

17 PARTNERSHIPS FOR THE GOALS



Goal 17.
Strengthen the means of implementation and revitalize the global partnership for sustainable development

- 17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
- 17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries
- 17.3 Mobilize additional financial resources for developing countries from multiple sources
- 17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress
- 17.5 Adopt and implement investment promotion regimes for least developed countries
- 17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
- 17.8 Fully operationalize the technology bank and science, technology and innovation capacity building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
- 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation
- 17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda
- 17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
- 17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access
- 17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence
- 17.14 Enhance policy coherence for sustainable development
- 17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
- 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
- 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
- 17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- 17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

Annex IV: Lebanon Industry 2025 - The integrated vision For Lebanese Industrial Sector

Recommendation/ Intervention	Primary SDG Targets	SCAN Tab	SDG	SDG Target (blue = primary target alignment)	SCAN Category	Action	Link +/-	Description of Link	Primary Source
Fifth Objective: Encourage Green Industry Steps: •Use of renewable and alternative energy and encourage increasing energy efficiency.	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Industry	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Increase energy efficiency	Energy efficiency		Reduces air and water pollution	SCAN
	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Industry	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Reduce emissions intensity	Fuel switch away from FF		Increases air pollution from biomass - e.g. switching from gas boilers to biomass has negative impact on local air pollution	SCAN
	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	Industry	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Reduce emissions intensity	Fuel switch away from FF		Reduced air and water pollution from fossil fuel use	SCAN
	7.3 By 2030, double the global rate of improvement in energy efficiency	Industry	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Reduce emissions intensity	Fuel switch away from FF		Increases air pollution from biomass - e.g. switching from gas boilers to biomass has negative impact on local air pollution	SCAN
	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Industry	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Reduce emissions intensity	Fuel switch away from FF		Reduced air and water pollution from fossil fuel use	SCAN
	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Industry	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Increase energy efficiency	Energy efficiency		Reduces air and water pollution	SCAN
		Industry	6.3	By 2030, improve 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	Increase energy efficiency	Energy efficiency		Reduces water pollution (thermal)	SCAN
	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Industry	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Reduce emissions intensity	Fuel switch away from FF		Switching from e.g. gas boilers to biomass process heating systems increases water use from biomass cultivation	SCAN
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Industry	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Reduce emissions intensity	Fuel switch away from FF		Moving to low emissions technologies (e.g. solar thermal) can reduce water use from power generation	SCAN
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Industry	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Increase energy efficiency	Energy efficiency		Reduces water use from energy generation	SCAN
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Industry	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Increase energy efficiency	Energy efficiency		improves conservation of water ecosystems through reduced water consumption from power generation	SCAN
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Industry	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Reduce emissions intensity	Fuel switch away from FF		Moving to low emissions technologies (e.g. solar thermal) can reduce water use from power generation	SCAN
		Industry	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Reduce emissions intensity	Fuel switch away from FF		Switching from e.g. gas boilers to biomass process heating systems impacts water ecosystems due to biomass cultivation	SCAN
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Industry	7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	Reduce emissions intensity	Fuel switch away from FF		Uptake of low emissions energy technologies in industry (e.g. solar thermal) increases access to modern energy services	SCAN
		Industry	7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	Increase energy efficiency	Energy efficiency		Decreases energy poverty due to improved energy affordability, increases energy security due to decreased imports and greater reliability, and improves access to modern and sustainable energy services	SCAN

Industry	7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Reduce emissions intensity	Fuel switch away from FF		Increases share of renewables in energy mix (e.g. using biomass or concentrated solar thermal for industrial process heat)	SCAN
Industry	7.3	By 2030, double the global rate of improvement in energy efficiency	Increase energy efficiency	Energy efficiency		Increases energy efficiency	SCAN
Industry	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Increase energy efficiency	Energy efficiency		Increases economic productivity, contributes to technological and infrastructure upgrading, and supports economic diversification and innovation	SCAN
Industry	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Reduce emissions intensity	Fuel switch away from FF		Contributes to technological and infrastructure upgrading, and to economic diversification and innovation	SCAN
Industry	8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	Increase energy efficiency	Energy efficiency		Industrial EE programmes can support entrepreneurship, job creation and Micro, Small and Medium Enterprises (MSME) formation	SCAN
Industry	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Increase energy efficiency	Energy efficiency		Increases resource efficiency and contributes to decoupling growth from environmental degradation	SCAN
Industry	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Reduce emissions intensity	Fuel switch away from FF		Move to renewable fuels for industrial heat (concentrated solar, biomass) can improve resource efficiency and reduce environmental degradation	SCAN
Industry	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Increase energy efficiency	Energy efficiency		Supports decent job creation through new opportunities to help companies improve industrial process efficiency	SCAN
Industry	8.8	Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Increase energy efficiency	Energy efficiency		Reduces unsafe jobs by reducing mining (e.g. coal)	SCAN
Industry	8.8	Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Reduce emissions intensity	Fuel switch away from FF		Reduces unsafe jobs by reducing mining (e.g. coal)	SCAN
Industry	9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Increase energy efficiency	Energy efficiency		Improved industrial process efficiency supports the development of sustainable and reliable infrastructure	SCAN
Industry	9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Reduce emissions intensity	Fuel switch away from FF		Uptake of low emissions energy technologies in industry (e.g. concentrated solar thermal) supports development of sustainable and reliable infrastructure	SCAN
Industry	9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Increase energy efficiency	Energy efficiency		Supports sustainable industrialization and could improve industrial productivity and profitability	SCAN
Industry	9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Reduce emissions intensity	Fuel switch away from FF		Supports sustainable industrialization and could improve industrial productivity and profitability	SCAN
Industry	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Increase energy efficiency	Energy efficiency		Increases resource efficiency and supports adoption of environmentally sound technologies and processes	SCAN

Industry	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Reduce emissions intensity	Fuel switch away from FF		Increases resource efficiency and supports adoption of environmentally sound technologies and processes	SCAN
Industry	9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Increase energy efficiency	Energy efficiency		Improving energy efficiency requires research and supports upgrading of technological capability and encourages innovation	SCAN
Industry	9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Reduce emissions intensity	Fuel switch away from FF		Developing and implementing low emission energy sources requires research and supports upgrading of technological capability and encourages innovation	SCAN
Industry	11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Increase energy efficiency	Energy efficiency		Improving energy efficiency in industry supports sustainable urbanization	SCAN
Industry	11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Reduce emissions intensity	Fuel switch away from FF		Developing and implementing low emission energy sources in industry supports sustainable urbanization	SCAN
Industry	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Increase energy efficiency	Energy efficiency		Protects natural habitats through reduced energy related pollution and reduced fossil fuel extraction activity	SCAN
Industry	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Reduce emissions intensity	Fuel switch away from FF		Protects natural habitats through reduced fossil fuel extraction and pollution from FF combustion	SCAN
Industry	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Reduce emissions intensity	Fuel switch away from FF		Potential impact on natural habitats from biomass cultivation	SCAN
Industry	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Reduce emissions intensity	Fuel switch away from FF		Low emission energy technologies (e.g. concentrated solar thermal) in industry reduces the impact of industrial activity in cities	SCAN
Industry	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Reduce emissions intensity	Fuel switch away from FF		Increased air pollution from industrial use of biomass - e.g. switching from gas boilers to biomass has negative impact on local air pollution	SCAN
Industry	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Increase energy efficiency	Energy efficiency		Improving energy efficiency in industry reduces the impact of cities (through reduced pollution from industry within city areas)	SCAN
Industry	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Increase energy efficiency	Energy efficiency		Energy efficiency supports sustainable use of resources	SCAN
Industry	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Reduce emissions intensity	Fuel switch away from FF		Renewable energy technologies for industrial heat supports sustainable resource use	SCAN
Industry	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Increase energy efficiency	Energy efficiency		Improved energy efficiency reduces air pollution	SCAN
Industry	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Reduce emissions intensity	Fuel switch away from FF		Reduced air pollution from displaced FF combustion	SCAN

		Industry	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Reduce emissions intensity	Fuel switch away from FF		Potential increased air pollution from industrial use of biomass fuels	SCAN
		Industry	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Increase energy efficiency	Energy efficiency		Supporting improved energy efficiency in industrial processes supports adoption of sustainable practices by companies	SCAN
		Industry	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Reduce emissions intensity	Fuel switch away from FF		Supporting development of low carbon energy sources for industry supports adoption of sustainable practices by companies	SCAN
		Industry	14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	Increase energy efficiency	Energy efficiency		Reduces water thermal pollution	SCAN
		Industry	15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Increase energy efficiency	Energy efficiency		Improved energy efficiency supports conservation of water ecosystems through increased resource efficiency and reduced pollution	SCAN
		Industry	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Increase energy efficiency	Energy efficiency		Reduced habitat degradation (fossil fuel activities and pollution)	SCAN
		Industry	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Reduce emissions intensity	Fuel switch away from FF		Reduces degradation of natural habitats through reduced FF related pollution (e.g. concentrated solar power for industrial heat)	SCAN
		Industry	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Reduce emissions intensity	Fuel switch away from FF		Potential increased degradation of natural habitats due to unsustainable biomass cultivation	SCAN
Fifth Objective: Encourage Green Industry Steps: •Encourage recycling.	6.3 By 2030, improve 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	Waste	6.3	By 2030, improve 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	Changing activity	Reduce, Reuse, Recycle		Reduces the amount of waste and garbage produced by increasing recycling and safe reuse	SCAN
	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Waste	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Changing activity	Reduce, Reuse, Recycle		Increase resource efficiency by reducing waste production	SCAN
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Waste	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Changing activity	Reduce, Reuse, Recycle		Actions to increase recycling can contribute to formalize the sector and create decent jobs	SCAN
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Waste	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Changing activity	Reduce, Reuse, Recycle		Contributes to achieve increased resource-use efficiency	SCAN
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Waste	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Changing activity	Reduce, Reuse, Recycle		Reduces environmental impact of cities through waste management	SCAN
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their	Waste	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Changing activity	Reduce, Reuse, Recycle		Contributes to efficient use of natural resources	SCAN

	<p>adverse impacts on human health and the environment</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p>	Waste	12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Changing activity	Reduce, Reuse, Recycle		Contributes to reduce waste generation through prevention, reduction, recycling and reuse	SCAN
		Waste	12.6	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Changing activity	Reduce, Reuse, Recycle		Reduces environmental impact of waste through encouraging companies to recycle	SCAN
<p>Fifth Objective: Encourage Green Industry Steps:</p> <p>•Urge industrial enterprises to obtain ISO 14000 certification environmental management and ISO 26000 on Social responsibility.</p>	<p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</p> <p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</p>	Industry	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Changing activity	Changing activity		Certification in environmental management can support activities that lead to the reduction in air pollution and water pollution due to avoided deposition and/or leakage of pollutants and reduces soil pollution due to avoided deposition and/or leakage of pollutants	MODIFIED FROM SCAN
	<p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p>	Industry	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Changing activity	Changing activity		Certification in environmental management can support activities that lead to the reduction in air pollution and water pollution due to avoided deposition and/or leakage of pollutants and reduces soil pollution due to avoided deposition and/or leakage of pollutants	MODIFIED FROM SCAN
	<p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p>		4.7	4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Changing activity	Changing activity		Green certification can help to ensure all industries are educated and aware about energy conservation and environmental awareness	LOCAL EXPERT
	<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p>								
	<p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p>	Industry	6.3	By 2030, improve 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	Changing activity	Changing activity		Certification in environmental management can support activities that lead to reductions in water pollution from process and material efficiency and reduced product demand	MODIFIED FROM SCAN
	<p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	Industry	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Changing activity	Changing activity		Certification in environmental management can support activities that lead to reductions in water use from process and material efficiency and reduced product demand	MODIFIED FROM SCAN
	<p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</p>	Industry	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Changing activity	Changing activity		Certification in environmental management can support activities that lead to Improves conservation of water ecosystems through reduced industrial activity and reduced water pollution	MODIFIED FROM SCAN
	<p>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p>	Industry	7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Changing activity	Changing activity		Environmental management certifications can support an increased share of renewables in the mix	LOCAL EXPERT
		Industry	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Changing activity	Changing activity		Certification in environmental management can support activities that increases economic productivity, contributes to technological and infrastructure upgrading, and supports economic diversification and innovation	MODIFIED FROM SCAN
		Industry	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Changing activity	Changing activity		Certification in environmental management can lead to activities that increase resource efficiency	MODIFIED FROM SCAN

Industry	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Changing activity	Changing activity		Certification in environmental management can support that the creation of decent jobs through new opportunities to help companies improve process and material efficiency	MODIFIED FROM SCAN
Industry	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Changing activity	Changing activity			SCAN
Industry	8.8	Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Changing activity	Changing activity		Certification in environmental management may lead to improvements in safety the workplace (disposal of chemicals, reducing indoor emissions, etc.)	LOCAL EXPERT
Industry	9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Changing activity	Changing activity		Environmental certification can support sustainable industrialization and could improve industrial productivity and profitability	MODIFIED FROM SCAN
Industry	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Changing activity	Changing activity		Certification in environmental management can increase resource efficiency and supports adoption of environmentally sound technologies and processes	MODIFIED FROM SCAN
Industry	9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Changing activity	Changing activity		Certification in environmental management can improve material efficiency and product design requires research and supports upgrading of technological capability and encourages innovation	MODIFIED FROM SCAN
Industry	11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Changing activity	Changing activity		Certification in environmental management can improve material efficiency in industry which supports sustainable urbanization	MODIFIED FROM SCAN
Industry	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Changing activity	Changing activity		Certification in environmental management can help to protect natural habitats through improved resource efficiency and reduced pollution	MODIFIED FROM SCAN
Industry	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Changing activity	Changing activity		Certification in environmental management can support activities that lead to improved material efficiency in design and processes and more durable, longer lasting products helps reduce the impact of cities (which include industrial activity)	MODIFIED FROM SCAN
Industry	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Changing activity	Changing activity		Certification in environmental management can improve material efficiency and improved product design supports sustainable use of resources	MODIFIED FROM SCAN
Industry	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Changing activity	Changing activity		Certification in environmental management can improve material efficiency and improved product design supports sustainable chemical and waste management and reduced pollution	MODIFIED FROM SCAN
Industry	12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Changing activity	Changing activity		Certification in environmental management can support resource efficiency and supports prevention, reuse and recycling (e.g. from material efficiency in process and product design)	MODIFIED FROM SCAN
Industry	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Changing activity	Changing activity		Certification in environmental management can support improved resource efficiency in process and product design supports adoption of sustainable practices by companies	MODIFIED FROM SCAN

		Industry	14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	Changing activity	Changing activity		Certification in environmental management can lead to actions that reduce water pollution (deposition/leakage)	MODIFIED FROM SCAN
		Industry	15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Changing activity	Changing activity		Certification in environmental management can improve material efficiency and product design supports conservation of water ecosystems through increased resource efficiency and reduced pollution	MODIFIED FROM SCAN
		Industry	15.2	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	Changing activity	Changing activity		Certification in environmental management can support actions that lead to improved material efficiency and product design reduces volume of material inputs including timber and other forestry products used in industry	MODIFIED FROM SCAN
		Industry	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Changing activity	Changing activity		Certification in environmental management can lead to actions that support reduced habitat degradation from reduced requirement for material inputs	MODIFIED FROM SCAN
		Industry	17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Changing activity	Changing activity		Certification in environmental management can help to promote effective public, public-private, and civil society partnerships	LOCAL EXPERT
Fifth Objective: Encourage Green Industry Steps: •Collaborate with Ministry of Environment to help industries becoming eco-friendly.	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	Industry	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Changing activity	Changing activity		Public private collaboration can help support industries to reduce air pollution, reduce water pollution due to avoided deposition and/or leakage of pollutants and reduces soil pollution due to avoided deposition and/or leakage of pollutants	MODIFIED FROM SCAN
	7.3 By 2030, double the global rate of improvement in energy efficiency	Industry	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Changing activity	Changing activity		Public private collaboration can help support industries to reduce air pollution, reduce water pollution due to avoided deposition and/or leakage of pollutants and reduces soil pollution due to avoided deposition and/or leakage of pollutants	MODIFIED FROM SCAN
	7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology								
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Industry	6.3	By 2030, improve 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	Changing activity	Changing activity		Public private collaboration can help support industries to reduce water pollution (deposition/leakage) from process and material efficiency and reduced product demand	SCAN
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Industry	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Changing activity	Changing activity		Public private collaboration can help support industries to reduces water use from process and material efficiency and reduced product demand	SCAN
	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Industry	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Changing activity	Changing activity		Public private collaboration can help support industries to improve conservation of water ecosystems through reduced industrial activity and reduced water pollution	SCAN
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Industry	7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Changing activity	Changing activity		Private sector collaboration can support the increase of the share of renewables in the energy mix	LOCAL EXPERT
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Industry	7.3	By 2030, double the global rate of improvement in energy efficiency	Changing activity	Changing activity		Private sector collaboration can support improved industrial energy efficiency	LOCAL EXPERT
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Industry	7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	Changing activity	Changing activity		International cooperation to benefit from foreign experiences through the provision of agreements, scientific cooperation and exchange of experiences.	LOCAL EXPERT-PLAN

<p>16.6 Develop effective, accountable, and transparent institutions at a levels</p> <p>17.3 Mobilize additional financial resources for developing countries from multiple sources</p> <p>17.14 Enhance policy coherence for sustainable development</p> <p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries</p> <p>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p>	Industry	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Changing activity	Changing activity		Public private collaboration can help support activities that increases economic productivity, contributes to technological and infrastructure upgrading, and supports economic diversification and innovation	MODIFIED FROM SCAN
	Industry	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Changing activity	Changing activity		Public private collaboration can help support activities that increases resource efficiency and contributes to decoupling growth from environmental degradation through process and material efficiency and reduced product demand	MODIFIED FROM SCAN
	Industry	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Changing activity	Changing activity		Collaboration can help support decent job creation through new opportunities to help companies improve process and material efficiency	MODIFIED FROM SCAN
	Industry	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Changing activity	Changing activity		Potential job losses in industrial supply chain if material efficiency lowers demand for certain materials	SCAN
	Industry	8.8	Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Changing activity	Changing activity		Can reduce unsafe jobs through better regulation of environmental safety	LOCAL EXPERT
	Industry	9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Changing activity	Changing activity		Collaboration can help support industries to...	SCAN
	Industry	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Changing activity	Changing activity		Public- private collaboration can help support sustainable industrialization and could improve industrial productivity and profitability	MODIFIED FROM SCAN
	Industry	9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Changing activity	Changing activity		Public- private collaboration can help support improved material efficiency and product design requires research and supports upgrading of technological capability and encourages innovation	MODIFIED FROM SCAN
	Industry	11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Changing activity	Changing activity		Public- private collaboration can help support improved material efficiency and product design requires research and supports upgrading of technological capability and encourages innovation	MODIFIED FROM SCAN
	Industry	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Changing activity	Changing activity		Public- private collaboration can help support the protection of natural habitats through improved resource efficiency and reduced pollution	MODIFIED FROM SCAN
	Industry	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Changing activity	Changing activity		Public- private collaboration can help support improved material efficiency in design and processes and more durable, longer lasting products helps reduce the impact of cities (which include industrial activity)	MODIFIED FROM SCAN
	Industry	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Changing activity	Changing activity		Public- private collaboration can help support material efficiency and improved product design supports sustainable use of resources	MODIFIED FROM SCAN

		Industry	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Changing activity	Changing activity		Public- private collaboration can help support material efficiency and improved product design supports sustainable chemical and waste management and reduced pollution	MODIFIED FROM SCAN
		Industry	12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Changing activity	Changing activity		Public- private collaboration can help support	MODIFIED FROM SCAN
		Industry	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Changing activity	Changing activity		Public- private collaboration can help support improved resource efficiency in process and product design supports adoption of sustainable practices by companies	MODIFIED FROM SCAN
		Industry	14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	Changing activity	Changing activity		Public- private collaboration can help support reduced water pollution (deposition/leakage)	SCAN
		Industry	15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Changing activity	Changing activity		Public- private collaboration can help support improved material efficiency and product design supports conservation of water ecosystems through increased resource efficiency and reduced pollution	SCAN
		Industry	15.2	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	Changing activity	Changing activity		Public- private collaboration can help support improved material efficiency and product design reduces volume of material inputs including timber and other forestry products used in industry	MODIFIED FROM SCAN
		Industry	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Changing activity	Changing activity		Public- private collaboration can help support reduced habitat degradation from reduced requirement for material inputs	MODIFIED FROM SCAN
		Industry	16.6	Develop effective, accountable, and transparent institutions at a levels	Changing activity	Changing activity		Legislation. policies and regulation that support the development of greener industries	LOCAL EXPERT
		Industry	17.3	Mobilize additional financial resources for developing countries from multiple sources	Changing activity	Changing activity		Mobilization of financial resources that support greener industries	LOCAL EXPERT
		Industry	17.14	Enhance policy coherence for sustainable development	Changing activity	Changing activity		Policy coherence is created through legislation, policies and regulations that support greener industries	LOCAL EXPERT
		Industry	17.16	17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	Changing activity	Changing activity		Industrial cooperation agreements that support the promotion of green industries through international agreements	LOCAL EXPERT-PLAN
		Industry	17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Changing activity	Changing activity		Private sector collaboration with the Ministry of environment can assist in the creation of a greener industry	LOCAL EXPERT
Fifth Objective: Encourage Green Industry Steps: •Promote the use of green and energy saving buildings.	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Buildings	1.2	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Increase energy efficiency	Energy efficiency		Energy efficient buildings increases energy access and reduces energy expenditure	MODIFIED FROM SCAN
	7.3 By 2030, double the global rate of improvement in energy efficiency	Buildings	3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Increase energy efficiency	Energy efficiency		Energy efficient buildings reduces air pollution and improves mental health and well-being due to decreased urban heat island effect	MODIFIED FROM SCAN
	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Buildings	3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Increase energy efficiency	Energy efficiency		Energy efficient buildings reduces air pollution	MODIFIED FROM SCAN
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in	Buildings	6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Increase energy efficiency	Energy efficiency		Energy efficient buildings reduces water use from energy generation	MODIFIED FROM SCAN

accordance with their respective capabilities

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

12.2 By 2030, achieve the sustainable management and efficient use of natural resources

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

Buildings	6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Increase energy efficiency	Energy efficiency		Energy efficient buildings supports conservation of water ecosystems due to reduced water use from energy generation	MODIFIED FROM SCAN
Buildings	7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	Increase energy efficiency	Energy efficiency		Energy efficient buildings can decreases energy poverty due to improved energy affordability, increases energy security due to decreased imports and greater reliability, and improves access to modern and sustainable energy services	MODIFIED FROM SCAN
Buildings	7.3	By 2030, double the global rate of improvement in energy efficiency	Increase energy efficiency	Energy efficiency		Promoting the use of green and energy saving buildings can support a decrease of greenhouse gas emissions in the industrial sector	LOCAL EXPERT
Buildings	8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Increase energy efficiency	Energy efficiency		Energy efficient buildings increases economic productivity, contributes to technological and infrastructure upgrading, and supports economic diversification and innovation	MODIFIED FROM SCAN
Buildings	8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	Increase energy efficiency	Energy efficiency		Energy efficient buildings supports decent job creation and entrepreneurship, and formalization of small enterprises through support for e.g. EE retrofit programmes	MODIFIED FROM SCAN
Buildings	8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Increase energy efficiency	Energy efficiency		Energy efficient buildings increases resource efficiency and contributes to decoupling growth from environmental degradation	MODIFIED FROM SCAN
Buildings	8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Increase energy efficiency	Energy efficiency		Building retrofit programmes support decent job creation and productive employment (e.g. EE retrofit programmes)	MODIFIED FROM SCAN
Buildings	9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Increase energy efficiency	Energy efficiency		Energy efficient buildings support the development of sustainable and resilient infrastructure and supports human well-being (better quality living environments)	MODIFIED FROM SCAN
Buildings	9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Increase energy efficiency	Energy efficiency		Retrofit programs support sustainable industrialization through creation of demand for more energy efficient construction methods and building products	MODIFIED FROM SCAN
Buildings	9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Increase energy efficiency	Energy efficiency		Supports upgrading and retrofitting of industries, increased resource efficiency, and adoption of environmentally sound technologies through more efficient (industrial) buildings and appliances	SCAN
Buildings	9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Increase energy efficiency	Energy efficiency		Building retrofit programs supports R&D and upgrading of industrial capabilities by creating demand for new energy efficient building methods and materials and energy efficient technologies	MODIFIED FROM SCAN
Buildings	11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	Increase energy efficiency	Energy efficiency		Energy efficient buildings improves can reduce energy poverty by increasing affordability	MODIFIED FROM SCAN
Buildings	11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Increase energy efficiency	Energy efficiency		Improved energy efficiency contributes to sustainable urbanization	SCAN
Buildings	11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Increase energy efficiency	Energy efficiency		Energy efficient buildings can support improved ecosystem and habitat conservation due to reduced pollution	MODIFIED FROM SCAN

		Buildings	11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Increase energy efficiency	Energy efficiency		Reduces impact of cities through more efficient energy use and reduced pollution (from energy generation/consumption)	SCAN
		Buildings	12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Increase energy efficiency	Energy efficiency		Increases resource efficiency through more energy efficient buildings and appliances	SCAN
		Buildings	12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Increase energy efficiency	Energy efficiency		Contributes to reduced air pollution through reduced fuel consumption	SCAN
		Buildings	12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Increase energy efficiency	Energy efficiency		Can support companies to adopt sustainable practices e.g. through energy efficiency retrofit schemes	SCAN
		Buildings	15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Increase energy efficiency	Energy efficiency		Energy efficient buildings Improves conservation of water ecosystems and improves ecosystem and habitat conservation due to reduced pollution	MODIFIED FROM SCAN
		Buildings	15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Increase energy efficiency	Energy efficiency		Energy efficient buildings Reduces degradation of natural habitats through reduced pollution	MODIFIED FROM SCAN
		Buildings	17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Changing activity	Changing activity		Private sector collaboration with the Ministry of environment can assist in creating green and energy efficient buildings	LOCAL EXPERT

- 3.9 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
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- 7.1 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 7.2 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 7.3 6.3 By 2030, improve 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
- 7.a
 - 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
 - 8.2 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
 - 8.3 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
 - 8.4 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
 - 8.5 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
 - 9.1 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
 - 9.2 7.3 By 2030, double the global rate of improvement in energy efficiency
 - 9.4 7.3 By 2030, double the global rate of improvement in energy efficiency
 - 9.5 7.3 By 2030, double the global rate of improvement in energy efficiency
- 9.b
 - 7.3 By 2030, double the global rate of improvement in energy efficiency
- 9.c
 - 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- 11.6 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 12.4 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 12.5 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
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- 12.a
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 - 16.6 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
- 17.14 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
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- 17.17 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 17.7 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
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- 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
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- 9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
- 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
- 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
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- 12.2 By 2030, achieve the sustainable management and efficient use of natural resources
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- 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
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- 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
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- 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
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- 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
- 16.6 Develop effective, accountable, and transparent institutions at a levels
- 17.14 Enhance policy coherence for sustainable development
- 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
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- 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
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- 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
- 17.3 Mobilize additional financial resources for developing countries from multiple sources
- 17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed

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