

# Managing environmental and social impact



# Managing our environmental & social impact

Renewable energy projects may trigger environmental and social impacts. We endeavor to minimise our negative impacts, maximise local benefits and ensure constructive dialogue with project stakeholders.

## Key risks:

- Land resettlement
- Water and waste management
- Labour and working conditions
- Biodiversity
- End of life management

## Key opportunities:

- Low carbon transition
- Impact management
- Community development
- End of life strategy



[Corporate policies](#)

Our project activities are conducted in accordance with local laws, corporate Company policies and requirements defined by international standards including the IFC's Performance Standards and the Equator Principles.

## Our Compliance model



### Legal compliance

All our project activities are conducted in accordance with local laws.



### International standards and norms

Relevant areas: land acquisition and involuntary resettlement, human rights, biodiversity conservation, labour and working conditions, pollution prevention, community health and safety, indigenous people, and cultural heritage.



### Supplier code of conduct

Our suppliers, contractors and local partners are expected to sign our Code of Conduct governing the way we work.



### Scatec governing documents and policies

Scatec's policies, procedures and frameworks are captured in our internal operating system and guide our business activities. Our policies are publicly available on our corporate website.

# Environmental and Social Management System

We follow standardised processes in all our projects to identify, mitigate and monitor our potential risks and impacts. This work forms part of our corporate Environmental and Social Management System (ESMS).

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## ESIA

### Environmental and Social Impact Assessments

Assessments of the potential environmental and social risk and impact of activities during the development, construction and operations phases of a project

We conduct environmental and social baseline studies/impact assessments (ESIAs) for all projects to identify potential environmental and social risks and impacts of our activities. In 2020, ESIAs were under development for projects in Pakistan, Vietnam, Brazil and Bangladesh.

#### Project classification according to the Equator Principles:

**Category A:** Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented

**Category B:** Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures

**Category C:** Projects with minimal or no adverse environmental and social risks and/or impacts

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## ESAP

### Environmental and Social Action Plan

List of environmental and social actions/measures, with responsibilities and deadlines, to reduce the impact identified during the initial assessments

The next step is the establishment of Environmental and Social Action Plans (ESAPs) based on initial Environmental and Social assessments for all projects.

The ESAPs are often developed in close dialogue with project and financing partners and usually include the following items:

- Corrective actions/measures
- Purposes of actions
- Responsibilities
- Status / progress
- Timeline

All projects under construction in 2020 are Category B projects with potential limited adverse social or environmental impacts

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## M&R

### Monitoring & Reporting

Regular monitoring and reporting internally in project teams and externally to project and financing partners

All our projects have regular Environmental and Social monitoring and reporting procedures in place as defined under the respective Environmental and Social management plans (ESMPs) under ESMS. Important monitoring measures include:

- Regular site inspections and registry of nonconformances
- Monthly project reports and monthly Board of Directors meetings
- Internal and third-party audits
- Regular environmental and social monitoring visits and status reports by lenders

## Our achievements and results

We are committed to operating all our projects in line with the IFC's Performance Standards and the Equator Principles. An overall focus during 2020 was to strengthen our existing corporate Environmental and Social Management System (ESMS) and develop a manual for all relevant policies, procedures and tools for more efficient and systematic management of environmental and social risks. We registered two non-conformances during the year, for which corrective actions were carried out. We are content with the review of our ESMS in 2020 and a key focus for 2021 will be to further integrate new technologies into our ESMS including wind and hydro.

The next sections summarise our management approach and key results from 2020 for material topics including human rights, biodiversity, water and climate.

### Human rights

#### Policy commitment to respect human rights

Scatec respects all internationally recognised human rights including the International Bill of Human Rights and the International Labour Organisation (ILO) Declaration on Fundamental Principles and Rights at Work.

Our human rights [policy](#) is aligned with the United Nations Guiding Principles on Business and Human Rights to prevent, address, and remedy human rights abuses committed in business operations. The policy confirms that Scatec's responsibility to respect human rights applies to our business enterprises wherever we operate and acknowledges that certain groups might require particular attention in relation to human rights risks (indigenous people, minorities, and vulnerable groups).

Although there were no specific cases related to human rights in 2020, we continue to focus on identifying any adverse impact, especially with regard to the risks outlined in the illustration below. Various measures and training programmes are being implemented to embed Scatec's commitment to human rights throughout the organisation.

#### Stakeholder engagement

A specific and separate risk assessment was conducted on human rights in 2020. Eleven topics related to human rights were categorised as either high, medium or low risk.



### 2020 High risk human rights topics

#### High risk:

- Land rights, displacement and loss of livelihoods
- Indigenous people, minorities and vulnerable groups
- Security forces
- Health, safety and environment including disposal of materials

#### Medium risk:

- Access to water
- Non-discrimination
- Forced and compulsory labour
- Freedom of association and collective bargaining

#### Low risk:

- Child labour
- Use of conflict minerals in the supply chain
- Environmental degradation





71%

of all employees completed corporate human rights training



65%

of all security personnel trained in human rights principles

### Human rights training

At the end of 2020, Scatec launched an interactive corporate human rights training for all employees. As per the publication of this report, the training had a 71% completion rate and 393 employees, including short term workers and consultants, had completed the training. We will continue to focus our efforts on reaching a 100% completion rate over the next few months. The training provides background to human rights and focuses on business and human rights and the specific role human rights play within Scatec and its operations. The training was also given to employees through workshops at locations where we encounter language barriers.

We also collaborated with a third party to develop and standardise a human rights training programme for security personnel in 2020. The training is in line with the Voluntary Principles on Security and Human Rights. Roll out of the training programme is planned for the second quarter of 2021. Scatec is also working to standardise training for other exposed groups, primarily community workers (CLOs and social staff).

### Grievance mechanism and whistleblowing channel

In line with the IFC Performance Standards, we pay special attention to the human rights risks of certain groups, such as indigenous people, minorities, women, children, migrant workers and other vulnerable groups. Scatec has both a whistleblowing channel and grievance mechanism in place in line with the IFC Performance Standards and UN Guiding Principles on Business and Human Rights.

## 2020 Corporate Human Rights Policy

In line with the Universal Declaration of Human Rights and the International Labour Organisation (ILO)

### Human rights due diligence

We conduct human rights due diligence as part of our overall E&S due diligence process. Scatec's Code of Conduct sets out the essential requirements for ethical business conduct within our company, which applies to all employees, hired consultants and directors, including our subsidiaries, joint ventures and affiliates. In addition, we do not enter into any contractual relationship with a third party without appropriate integrity due diligence.

Although there were no specific cases relating to human rights in 2020, some of our pipeline projects are currently undertaking pre-studies and environmental and social baseline assessments, where resettlement is a potential impact.



"A structured approach to risk-based due diligence is crucial to project success"

- Roar Haugland, EVP Sustainable Business & HSSE

## Environmental management: Water

Water is a scarce resource in many areas and therefore an important aspect of our environmental management.

Our main use of water relates to module cleaning in the operations phase of our projects. Various water sources are used in different locations including groundwater and potable water from municipal water networks. The amount of water needed depends on vegetation, module soiling, natural cleaning due to precipitation and cleaning methods utilised.

Water conservation awareness, minimising water use for dust suppression by maintaining road conditions and monthly monitoring to identify causes of abnormal volumes are

# 14%

reduction in water  
usage in Jordan in 2020



among the management considerations implemented at all plants. Efficiency is sought by avoiding unnecessary washing cycles and using effective washing methods like spraying.

We report on water extraction by source and volume for our projects located in water-stressed areas. Our projects in South Africa and Jordan are located in areas of medium or high-water risk as defined by the World Resources Institute's "Aqueduct Water Risk Atlas".

PROJECT CAPACITY	JORDAN			SOUTH AFRICA		
	ORYX 10MW	EJRE 22MW	GLAE 11MW	KALKBULT 75MW	LINDE 40MW	DREUNBERG 75MW
Litres	1,469,100	3,096,800	1,045,600	109,160	59,110	152,350
Source	Potable (municipal) water			Ground water		

**Jordan:** The large water use is primarily due to high soiling levels, and results from more frequent cleaning cycles compared to other locations. In 2019 we implemented the Ma'an module washing improvement initiative where existing spraying nozzles were replaced with more efficient ones. Our water-saving initiative combined with COVID-19 restrictions and favourable weather conditions, led to a 14% reduction in water usage, meeting our target for 2020.

We are content with the reduction in water usage and will continue to implement efforts in water stressed areas.

**South Africa:** Water-use licences for each facility are issued by the Department of Water and Sanitation, depending on the aquifer's size and other uses. Water volumes extracted for our plants are considerably below the volumes authorised by the licences.

## Environmental management: Corrective actions for waste in Ukraine



- In 2020, an environmental proceeding was opened for the EPC contractor in one of our projects in Ukraine
- Claims included environmental damage relating to waste disposal, topsoil removal within project site and damage to a bridge close to the project area

**Mitigating actions:** The claims were immediately investigated by Scatec and the representatives of the local community and a Corrective Action Plan was implemented:

1. Construction waste clean-up in cooperation with licensed waste mgt company for compliant disposal of waste
2. Levelling and recultivation of land with topsoil damage
3. Signing a framework agreement with Tiligul National Park for cooperation and improvement actions

### Outcome and status:

- The main actions of the Corrective Action Plan were completed by year-end 2020 with a few outstanding issues pending
- These issues will be closed by relevant stakeholders in Q2 2021 and include collection of household waste around project site, launch of a campaign to avoid future waste and maintenance of the damaged bridge

## Biodiversity

The development and construction of utility-scale renewable energy plants can have a number of environmental impacts. These may include degradation of habitats, reduction of resource availability and transformation of habitats, which can affect biodiversity. Subsequently, a pivotal part of project development comprises biodiversity impact assessments. If an impact is unavoidable, we always implement mitigation measures to minimise impacts and restore biodiversity.

For all our projects, land transformation is minimised and land use optimised to lessen impact on fauna and flora. Relevant measures during construction and operations include, among other things, fencing off storage areas, keeping lighting at a minimum and allowing the free movement (migration) of small animals by maintaining migration corridors underneath perimeter fences.

We always implement mitigation measures to minimise impacts and restore biodiversity.



Taking further action by creating biodiversity offsets to compensate for the residual, unavoidable impact on fauna and flora caused by projects will be considered to ensure no net loss and, where possible, a net gain in species. We will continue to focus our efforts not only on the mitigation of potential negative impacts, but on the restoration and creation of biodiversity areas.

### Biodiversity in Ukraine: Bird watching site

#### Background:

- Naturally functioning wetlands provide a range of benefits and services for people's livelihoods.
- Wetlands are extremely rich in biodiversity, including waterbirds.
- The loss of natural habitats coupled with excessive predator activity led to a sharp decline in the number of birds' species in the Tiligul Estuary.



#### Key initiatives and outcomes

Created a birdwatching site to support scientific research and to raise awareness and educational opportunities

The site monitors and identifies factors that negatively impact the number of rare and endangered species

Extensive educational work can be done at the site, emphasis on challenges related to the conservation of particular species

## Governance:

*The organisation's governance around climate-related risk and opportunities*

- The Chairman has the highest climate-related responsibility among the Board of Directors
- The Executive Management Team, led by the CEO, is responsible for assessing and managing climate-related risks and opportunities. The team reports directly to the Board of Directors on a monthly basis

## Strategy:

*Actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning where such information is material*

- Physical risks in terms of extreme weather events have been identified as our main risk, while our key opportunities are access to new markets and increased demand for our low-carbon energy production
- We have applied scenario analysis based on Bloomberg New Energy Finance's New Energy Outlook (BNEF NEO) to support our strategy and business decisions
- We aim to perform a scenario analysis aligned with TCFD's recommendations during 2021

## Risk management:

*How the organisation identifies, assesses and manages climate-related risks*

- Our process of identifying and assessing climate-related risks are integrated into our multi-disciplinary company-wide risk management process
- We have extensive policies and procedures in place as part of our operating system to actively manage risks related to the various parts of the Company's operations

## Metrics and targets:

*Metrics and targets are used to assess and manage relevant climate-related risks and opportunities where such information is material*

- Our carbon footprint accounting is in accordance with the Greenhouse Gas (GHG) protocol and has been calculated since 2017. In 2020, our carbon footprint accounting was based on activity data from 12 countries where we operate, including our headquarters in Norway
- We have set an absolute reduction target for Scope 1 and 2 to reduce our GHG emissions by more than 50% by 2030 and reach net zero by 2050 (base year 2019)

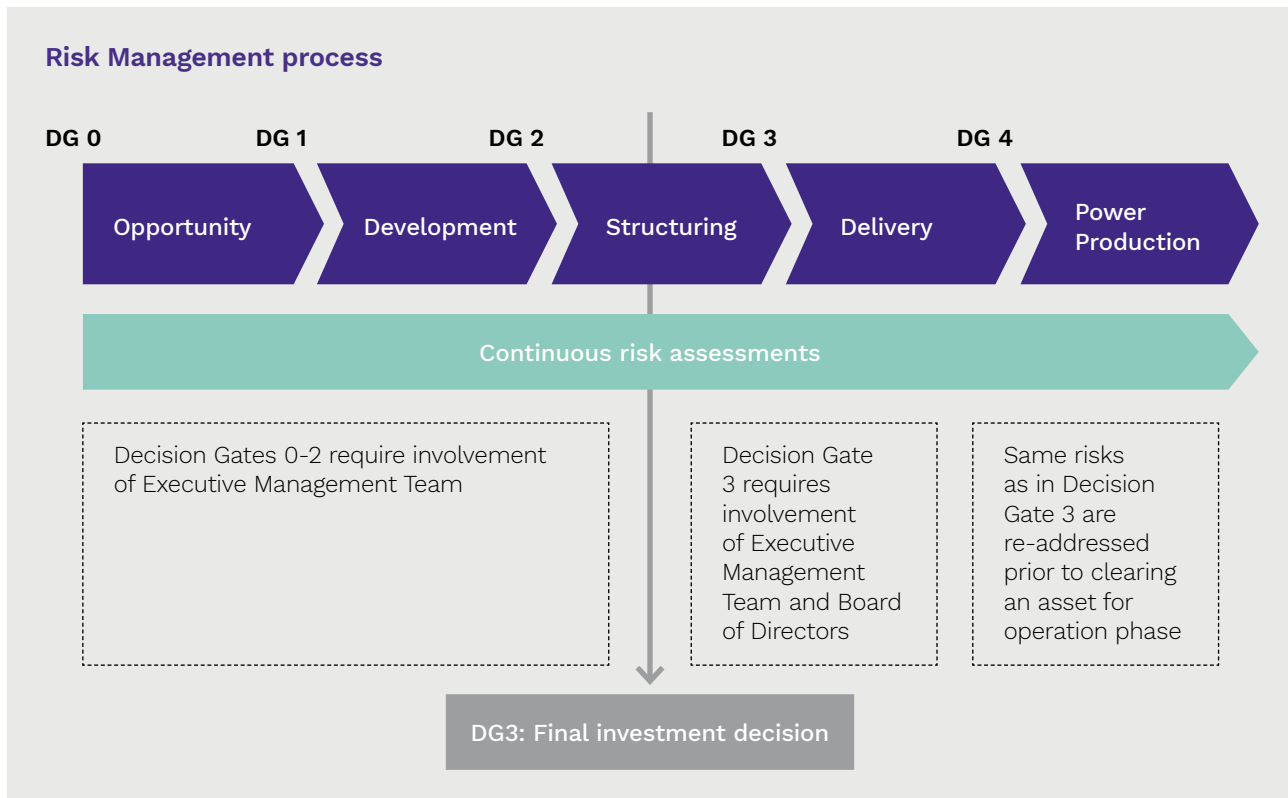


[Please refer to our full TCFD report on our corporate website for more information](#)



## Climate risk management

Scatec has extensive policies and procedures in place as part of our operating system to actively manage risks related to the various parts of our operations. This includes climate risk. The main climate-related risks concern the development, construction and operations phase of each renewable energy project.



For each project, risks are identified, reported and actively managed through all phases of the project (as outlined in our risk management process above). All projects report risk management status as part of their monthly reporting process, which is regularly reviewed by both the Executive Management Team and the Board of Directors. On a Group level, an annual review of the entire risk picture and the risk management system is performed by the Executive Management Team and reported to the Board of Directors.

### Key climate risk

Climate change could have a range of potential impacts on our business. We operate and own renewable energy power plants in local communities for 20–25 years, and it is therefore important to try to predict and evaluate potential climate-related risks to and opportunities for our people, business and physical assets.

The most serious climate-related risks involve the physical impact of extreme weather events, including droughts and floods. Refer to our TCFD report [here](#) for a full summary of key risk areas related to climate change and description of relevance to our business.

### Extreme weather

is one of the most serious climate-related risks to our business



Key climate opportunities

Climate change risks are forcing policymakers to seek low emission sources of energy when tendering for new power generation. Scatec focuses on renewable energy from solar, wind, hydro and storage solutions, and competes in public tenders globally.

We see new business opportunities opening up in emerging markets, where new energy capacity is desperately needed and where focus on renewables, time to market and price is significantly favouring solar and wind. New markets are opening up due to climate-related financing such as subsidies and partnerships with regional development banks to increase access to energy.

Scatec is well-positioned to exploit these opportunities through our experience with public-private partnerships and innovative finance solutions in collaboration with partners like the World Bank, the IFC, regional development banks, export credit agencies and Norfund.

GHG emissions avoided from our solar plants

By providing clean electricity, our renewable energy plants significantly contribute to reducing greenhouse gas

GHG EMISSIONS AVOIDED PER COUNTRY		ESTIMATED ANNUAL SAVING (TONNES OF CO2)
Brazil		29,400
Czech Republic		11,400
Egypt		450,900
Honduras		49,600
Jordan		43,400
Malaysia		136,300
Mozambique		4,800
Rwanda		7,500
South Africa		825,300
Ukraine		42,000

Source: Calculated based on local grid mix emission factors from the International Energy Association (IEA).



The low carbon transition

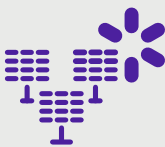
is one of the key climate opportunities for our business

emissions in every country where we operate. We take advantage of the emission reductions resulting from our plants in operation and our projects continue to be registered with the United Nations Framework Convention on Climate Change (UNFCCC) for verification and certification of electricity generation.

One of our 2020 targets was for annual GHG emissions avoided by our plants to reach 1.4 mill tonnes by year end 2020. Our plants in operation outperformed this target, reaching close to 1.6 mill tonnes avoided by year end, almost double that of 2019.

GHG emissions avoided from our operating solar plants in 2020

1.6 mill tonnes



“A 2020 key focus was to expand our scope 3 emissions reporting. We engaged with several key suppliers during the year to better understand their climate reporting and ambitions.”

- Julie Hamre, Head of ESG Reporting



## Climate Reporting

We reported to the Carbon Disclosure Project (CDP) in 2020 and was awarded top score and a place on its prestigious 'A' List for tackling climate change. This demonstrates our commitment to climate action and increased transparency for management of risks and opportunities posed by climate change. We are very satisfied with the efforts of expanding our scope 3 emissions reporting and setting ambitious climate targets.

### Our total carbon footprint

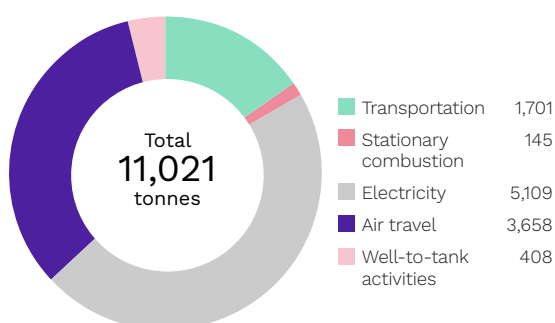
#### Reduction in scope 1 and 2 emissions in 2020

The total GHG emissions from our activities in 2020 amounted to 7,359 tonnes, reflecting a reduction from

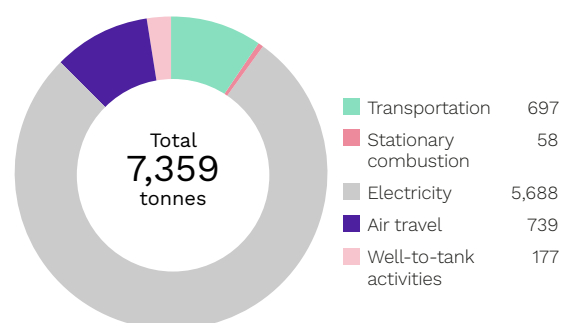
11,021 tonnes in 2019<sup>1)</sup>. This includes scope 1 emissions, market-based scope 2 emissions and air travel which falls under scope 3.

The overall decrease in emissions from 2019 is primarily due to less air travel following the restrictions imposed by the global pandemic in 2020. The increase in electricity is due to five projects moving into the operations phase during 2020. The decrease in transportation reflects less construction activities in 2020.

GHG emissions 2019



GHG emissions 2020







<sup>1)</sup> In 2019, due to a change in the calculation methodology for office electricity in South Africa, an additional 49 tonnes of GHG emissions should have been reported.

## Reporting on more of our scope 3 emissions

In 2020, we substantially expanded our scope 3<sup>1)</sup> emissions reporting to ensure we captured the largest indirect sources of GHG emissions in our value chain.

The carbon payback time is estimated to be about 1.5 years

CATEGORY	DESCRIPTION	CALCULATION METHODOLOGY	ESTIMATED GHG EMISSIONS
	<b>Purchased goods and services</b>	<ul style="list-style-type: none"> <li>We collaborated with our Procurement department to obtain the number of solar panels as well as weight of steel structures and inverters purchased for a project</li> <li>We obtained emission factors for solar panels and inverters from our suppliers</li> <li>An emission estimate for steel was obtained from desktop research</li> <li>Data on fuel usage by vehicles and on-site equipment (generators etc.) were provided by our EPC department</li> <li>Emissions from construction services activities were calculated using emission factors with the Department for Environment, Food and Rural Affairs (DEFRA) as source</li> </ul>	<p>For a project with a capacity of approx. 50 MW:</p> <p><b>23,000 – 28,000 tonnes</b> for solar panels</p> <p><b>8,000 – 10,000 tonnes</b> for steel structures</p> <p><b>900 – 1,100 tonnes</b> for inverters</p> <p><b>300 – 500 tonnes</b> for construction services' fuel for vehicles and on-site equipment</p>
	Solar panels (modules) predominantly procured in China		
	Steel structures predominantly procured in Europe		
	Inverter stations, including combiner boxes predominantly procured in Europe and China		
	<b>Upstream transportation and distribution</b>	<ul style="list-style-type: none"> <li>Information and key data points on containers shipped and transported were received from our Procurement department</li> <li>Emissions were calculated based on: Transported goods in ton-kilometres (weight of containers and total distances), origin (factory) and final destination (project construction site)</li> </ul>	<p>For a project with a capacity of approx. 50 MW:</p> <p><b>2,000 – 2,300 tonnes</b> for the transportation of procurement items</p>
	Transportation of procurement items from the manufacturing facility to the construction site		
	Employee commuting	<ul style="list-style-type: none"> <li>A generic emission factor was applied to estimate emissions related to commuting per employee</li> <li>The number of employees in the calculation are all full-time employees (figures provided by our HR department)</li> </ul>	<p>For all 435 full-time employees in 2020:</p> <p><b>200 – 300 tonnes</b></p>
	Waste generated in operations (only includes employee waste)	<ul style="list-style-type: none"> <li>An emission factor was applied for the estimated amount (kilograms) of waste (incinerated and recycled) per employee per year</li> <li>The number of employees in the calculation are all full-time employees</li> </ul>	<p>For all 435 full-time employees in 2020:</p> <p><b>30 – 40 tonnes</b></p>
	End-of-life treatment	<p>The end of life of a solar plant can take many shapes and forms. Global research on best practice indicates multiple options for the end-of-life treatment of equipment. Options include:</p> <ul style="list-style-type: none"> <li>Recycling equipment components</li> <li>Reusing equipment, i.e. extending useful life</li> <li>"Take-back" agreements with suppliers</li> <li>Disposal of equipment</li> </ul>	

1) The ranges of GHG emissions for scope 3 estimates have been reviewed by our carbon accounts supplier.

### Climate target to reach net zero by 2050

In line with our 2020 target, Scatec set ambitious climate goals during the year in line with the Science Based Target Initiative to reduce scope 1 and 2 emissions by more than 50% by 2030 and reach net zero by 2050.

This work remains a key priority for 2021, and we will work to develop a roadmap for reducing our emissions and continuing our collaborations with key suppliers.

## Scatec's climate target in line with the 1.5°C scenario:

Reduce scope 1 & 2 emissions by:

**More than 50%** by 2030

**Net zero** by 2050



### I-RECs purchased to reduce emissions from our electricity consumption in Egypt

In 2020, Scatec purchased I-RECs (International Renewable Energy Certificate) for 6,862 MWh of renewable energy in Egypt. Each I-REC represents proof that 1 MWh of renewable energy has been produced and includes the environmental benefits this renewable energy has generated. The certificate documents reductions of more than our total emissions from electricity usage in Egypt.

Refer to our corporate website for the Certificate verifying that 6,862 MWh of I-REC certified renewable energy has been delivered to Scatec in Egypt by ECOHZ for 2020.

### Green Bond Framework

With the acquisition of SN Power and the broadening scope of renewable energy investments, Scatec has established a new Green Financing Framework, enabling the Company to finance its contribution towards a low-carbon and climate resilient future. The Framework was developed in alignment with the Green Bond Principles 2018 and the Green Loan Principles 2018, and was rated "dark green" by the second party opinion carried out by CICERO. The

framework and second party opinion are available on our corporate website.

### Our ambitions and goals

We will continue our efforts to further strengthen and standardise our corporate environmental and social management system (ESMS) for all projects. A key priority in 2021 will be to initiate the development of a roadmap for reaching our climate targets. We also have the following key targets for 2021:

#### Environmental and social compliance

- Conduct Environmental and Social baseline assessments for all projects
- Develop Environmental and Social Action Plans for all projects and follow up all required activities

#### Human rights

- Strengthen our human rights due diligence process at a corporate and project level
- Rollout standardised human rights training to all Security personnel and Community Liaison Officers globally

#### Climate action

- GHG emissions avoided from our solar plants to reach around 4.4 million tonnes by year end 2021
- Develop a climate roadmap to reach our targets for 2030 and 2050
- Develop lifecycle assessments (LCA) on a selection of projects
- Become a signatory to the Science Based Target initiative (SBTi)

Purchased I-RECs  
equivalent to  
**6,862 MWh**  
in Egypt





