



# Scatec ASA

## Green Financing Second Opinion

05 February 2021

**Scatec ASA is an integrated independent power producer with a global portfolio of utility-scale solar PV, wind power and hydropower projects.** Starting out in 2007 as a solar PV company, in October 2020 the company acquired SN Power, thus adding 1.4 GW of hydropower assets to its PV portfolio. At the end of 2020, the combined company had 450 employees, power plants in 14 countries and gross 3.3 GW of plants in operation and under construction. Scatec ASA is headquartered in Oslo, Norway and listed on the Oslo Stock Exchange.

**Scatec's Green Financing Framework allows for financing and refinancing of assets in two categories: renewable energy (solar, wind and hydropower) and energy storage/solutions.** Both categories are crucial for reaching the objectives of the Paris Agreement and for providing access to modern clean energy in developing countries. In the next 12 months a majority of the proceeds will be used to finance the acquisition of SN Power. Investors should be aware that a majority of the assets have back-up diesel aggregators, but that hybrid ('release') projects and those which sell power to oil & gas exploration and mining operations have been excluded from the use of proceeds.

**Scatec has set out a robust procedure for adhering to the Green Bond/Loan Principles and its approach is best-in-class on various governance metrics.** The selection process for green eligible assets is well defined and includes a requirement of consensus-based decisions. We are impressed by the company's strong climate risk focus, as exemplified by its use of Science-Based Targets for emissions reductions, resilience analysis of assets and its early adoption of TCFD guidelines.

**Although undoubtedly crucial contributors to a decarbonised energy system, investors should be aware that renewable energy projects can have negative sustainability impacts – this is especially true of hydropower.** Hydropower dams can have high GHG emissions and lead to land/resettlement conflicts. Investments in storage assets will involve sourcing decisions related to conflict minerals, and the production of PV panels can have high carbon footprints. The acquisition of SN Power entails a new set of climate risks and we encourage Scatec to develop streamlined and robust sustainability assessment systems to cover these risks.

Based on an assessment of the framework's alignment with the Green Bond/Loan Principles, the project categories and the company's governance score, Scatec's green financing framework receives a **CICERO Dark Green** shading and a governance score of **Excellent**. To improve governance even further, Scatec could consider integrating its Sustainability Report (fully) into its Annual Report and adopting Life-Cycle-Analysis when screening suppliers.

### SHADES OF GREEN

Based on our review, we rate the Scatec ASA's green financing framework **CICERO Dark Green**.

Included in the overall shading is an assessment of the governance structure of the green financing framework. CICERO Shades of Green finds the governance procedures in Scatec's framework to be **Excellent**.



### GREEN BOND and GREEN LOAN PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.



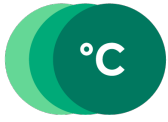


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# 1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated February 2021. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

## Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

### CICERO Shades of Green



**Dark green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



**Medium green** is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



**Light green** is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.

### Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green financing framework are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green financing framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.



## 2 Brief description of Scatec ASA's green financing framework and related policies

Scatec ASA is an integrated independent power producer, established in 2007 with a focus on utility-scale solar PV projects. In October 2020 the company acquired SN Power, thus adding 1.4 GW of hydropower assets to its PV portfolio. Its projects are located in Asia, Latin America, Africa and Europe. Going forward, it will invest in solar, wind, hydropower and energy storage activities globally. At the end of 2020, the combined company had 450 employees, power plants in 14 countries and gross 3.3 GW of plants in operation and under construction. Scatec ASA is headquartered in Oslo, Norway and listed on the Oslo Stock Exchange.

### Environmental Strategies and Policies

Scatec has set GHG reduction targets in line with the Science-Based Target Initiative (SBTI), including a draft target of 50% reduction in emissions from scope 1 and 2 by 2030. As a developer of renewable energy solutions, the company's business activities are intrinsically aimed at reducing GHG emissions in its countries of operation, however emissions do occur in the construction phase, along the supply chain and as a result of business operations – including the use of back-up diesel generators in most project locations. The company measures its scope 1 emissions, market-based scope 2 emissions and scope 3 emissions from air travel: in 2019 these amounted to 10,972 tCO<sub>2</sub>. In contrast, the company estimates that in the same year, 870,637 tCO<sub>2</sub> were avoided due to the operation of its solar plants. In addition to aiming to reduce GHG emissions, the company has set targets related to water usage for projects in critical water regions (e.g. Jordan and Egypt).

Scatec follows international sustainability guidelines for project development, including IFC's Performance Standard and the Equator Principles. The company uses a standardized Environmental and Social Management System (ESMS) and stakeholder engagement from the outset of each project. In a 2019 assessment of projects under construction, all projects received a 'B', meaning there is potential for limited adverse social and environmental impact. Projects are screened for climate change resilience and mitigating actions are undertaken (e.g. against flood risk).

Scatec has identified the following three SDG goals as relevant for its business: 7: affordable and clean energy; 8: decent work and economic growth, and 17: partnership for the goals.

The company has several initiatives in place related to supply chains, including a supplier code of conduct, a 3-stage screening process, and a supplier training programme. It follows the guidelines of Global Compact. Suppliers are screened on environmental criteria but are not subject to Life-Cycle-Assessments (LCA). Conflict minerals represent a recent area of concern for the company and work has commenced to roll out a policy to manage and mitigate risks related to this area.

Climate risk analysis and reporting: Scatec publishes a Sustainability Report in addition to its Annual Report (which has a summary of sustainability findings). The Sustainability Report is prepared in line with GRI and its annual GHG figures are externally verified. The company reports on climate risks and is planning to start scenario analyses during the course of 2021. Scatec follows the guidelines of TCFD ('more comprehensive risk disclosures') and CDP.



This green financing framework is not the company's first foray into green fixed income instruments. In 2017 Scatec Solar completed a NOK 750 million senior unsecured green bond issue with maturity in November 2021. The bond is listed on the Oslo Stock Exchange.

### Use of proceeds

An amount equivalent to the net proceeds from Scatec's Green Finance Instruments shall be used to finance or re-finance, in part or in full, projects or assets providing distinct environmental benefits ("Green Eligible Assets"). New financing is defined as financing of assets that have been taken into use during the previous 12 months prior to issuance of a Green Finance Instrument.

Green Eligible Assets are defined as investments that promote the green energy transition, and includes renewable energy generating and energy storage assets. Acquisitions of such projects as well as investments in share capital of companies with such assets are permitted – under the condition that Scatec has significant operational influence and that the use of proceeds is directly linked to the book value of the green eligible assets owned by the acquired company, adjusted for the share of equity acquired.

The proceeds of Scatec's Green Finance Instruments will not be used to finance fossil fuel energy generation, nuclear energy generation, weapons and defence industries, potentially environmentally negative resource extraction, gambling or tobacco.

Scatec has started to explore what the EU Taxonomy will mean for the Company's activities, including engaging a third party to undertake an independent assessment of alignment.

### Selection

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

The selection of Green Eligible Assets is managed by Scatec's Green Finance Committee ("GFC"), which is led by the EVP for Sustainable Business & HSSE. The group has eight members in total and will meet on an as-needed basis. All decisions are made in consensus and in accordance with the criteria defined in the Use of Proceeds section.

The CFO and Treasury Department are responsible for keeping an updated register of Green Eligible Assets. The GFC will monitor the developments of the green finance market and may update the Green Financing Framework to reflect future market practices, such as the upcoming EU Taxonomy and potential updates to the GBP and GLP.

The Company conducts Environmental and Social Impact Assessments (ESIA) for all projects, regardless of what financing option is utilized, and engages with key stakeholder groups such as local communities during the project phases. Scatec's corporate policies on supply chain and subcontractors will be applicable. It is in the process of rolling out a policy on conflict minerals.

### Management of proceeds

CICERO Green finds the management of proceeds of Scatec to be in accordance with the Green Bond/Loan Principles.



An amount equal to the net proceeds from Scatec's Green Finance Instruments will be tracked and used for financing and refinancing of Green Eligible Assets. The company will endeavour to ensure that the value of Green Eligible Assets at all times exceed the total amount of Green Finance Instruments outstanding. If a Green Eligible Asset already funded by Green Finance Instruments is sold or for other reasons loses its eligibility, the Company will strive to replace such asset by another qualifying Green Eligible Asset.

Any unallocated proceeds temporary held by Scatec will be placed in the Company's ordinary bank account or short-term money markets until deployed.

## Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

A Green Finance Report will be made available on the Company's website. The Green Finance Report will include an Allocation Report and an Impact Report and will be published annually as long as there are Green Finance Instruments outstanding. The Allocation Report will be subject to external verification and published on the Company's website. The Allocation Report will contain the following:

- ✓ Summary of main activities in green finance and related projects
- ✓ Total amount of Green Finance Instruments outstanding and split breakdown per instrument
- ✓ Share of proceeds used for financing/re-financing as well as share of proceeds used for various eligible categories
- ✓ Share of unallocated proceeds (if any)
- ✓ Some examples of financed projects

The Impact Report will to some extent be aggregated (per category and depending on needs) and depending on data availability, calculations will be made on a best intention basis. If assets are only partly financed by green finance instruments, impact reporting will reflect the relevant shares. Impact metrics may include:

- ✓ Annual renewable energy generation (MWh or GWh), in total and per renewable energy technology
- ✓ Capacity of renewable energy plants constructed or rehabilitated (MW or GW), in total and per renewable energy technology
- ✓ Estimated annual greenhouse gas emissions avoided (tCO<sub>2</sub>e)
- ✓ For energy storage, and other energy solutions: Capacity and technology of electricity storage installed (MW)



### 3 Assessment of Scatec's green financing framework and policies

The framework and procedures for Scatec's green financing investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where Scatec should be aware of potential macro-level impacts of investment projects.

#### Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Scatec's green financing framework, we rate the framework **CICERO Dark Green**.

#### Eligible projects under the Scatec's green financing framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds/loans aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bond/Loan Principles (GBP) state that the "overall environmental profile" of a project should be assessed and that the selection process should be "well defined".

Scatec has informed us that in the next 12 months a majority of the proceeds will be used to finance the acquisition of SN Power and that some 75% of the proceeds will go towards Renewable Energy.

Category	Eligible project types	Green Shading and some concerns
Renewable Energy	Investment activities and related expenditures, directed towards the acquisition, development, construction, operation, improvement and maintenance of electricity generation facilities that produce electricity from: <ul style="list-style-type: none"><li>• Solar power</li><li>• Wind power</li><li>• Hydropower</li></ul>	<b>Dark Green</b> <ul style="list-style-type: none"><li>✓ Renewable energy generation assets have positive climate benefits but may in some cases cause local environmental harm (biodiversity, landscape) and social conflicts. The company has experienced social unrest in the initial phases of some of its projects (e.g. in Honduras). By applying IFC's performance standards and its own stakeholder engagement strategy, Scatec is seeking to mitigate these impacts.</li><li>✓ Hydropower dams can have high GHG emission. The EU Taxonomy's technical screening criteria for hydropower are still subject to consultation (Delegated</li></ul>



Act) but provisionally a 5W/m<sup>2</sup> (alt: 100gCO<sub>2</sub>/kWh) threshold has been suggested. The Taxonomy's DNSH (do-no-significant-harm) criteria seek to mitigate any adverse impacts from renewable energy projects, including those from hydropower. Scatec has stated that it will monitor the development of the EU Taxonomy and may over time update its framework accordingly.

- ✓ All construction projects have adverse local environmental impacts and we encourage the issuer to ensure these are mitigated to the largest extent possible. Likewise, lifecycle emissions from construction and operation of projects should be mitigated through low-impact material choices and methods.
- ✓ Hydropower production is highly depended on weather patterns and climate change (precipitation). Systematic climate risk management and mitigation is a vital tool for ensuring long-term sustainable production.
- ✓ Investors should be aware that most solar PV projects have back-up diesel generators which are used which are used to power critical system components when there are power cuts. We encourage the issuer to be transparent if back-up is needed regularly and to consider the 'greenness' of these projects if operating problems persist.
- ✓ Renewable energy projects can be connected to the grid or standalone. The latter can be connected to high-polluting activities such as mining and oil&gas exploration, however Scatec has confirmed that investments in such assets would be excluded from the use-of-





proceeds. Also excluded from the use-of-proceeds are hybrid diesel-solar PV projects (so-called ‘release projects’)

- ✓ In addition to land-based PV, Scatec may in the future invest in floating solar assets. There is some concern that floating solar installations impact bio-organisms by panels preventing solar radiation from penetrating to the underlying water.

Energy storage and other energy solutions Investments in energy storage and other energy solutions to accommodate the build-out and integration of renewable energy



**Dark Green**

- ✓ Examples of ‘other energy solutions’ are high voltage substations, dedicated transmission lines and power management systems.
- ✓ Battery storage requires high volumes of environmentally sensitive materials, including lithium, manganese and cobalt. The supply chains for these materials need to be appropriately managed, to avoid creating new adverse social and environmental impacts. Responsible sourcing and recycling should be part of any project developer’s strategy. Scatec has confirmed that it is in the process of developing a sustainability strategy for rare earth metal sourcing.

Table 1. Eligible project categories

**Background**

In 2019, global renewable electricity generation grew 6% and reached a quarter of global power output, due to the continued growth of solar PV and wind technologies (accounting for 64% of this increase). Despite these positive trends, additional efforts are needed in renewable power generation to meet the targets set out in the IEA’s Sustainable Development Scenarios. According to the IEA, the share of renewables in global electricity generation must reach 47% by 2030, up from 25% in 2017<sup>1</sup>. It also requires average annual growth in solar PV of 15% between 2019 and 2030.

The Paris Agreement is also clear that climate change mitigation objectives should be fulfilled in the context of sustainable development and efforts to eradicate poverty. IEA’s sustainable development scenario requires \$40

<sup>1</sup> The IEA’s Sustainable Development Scenario (SDS) offers a pathway for the global energy system to reach three strategic goals: the Paris Agreement’s well below 2°C climate goal, universal energy access and substantially reducing air pollution. <https://www.iea.org/topics/tracking-clean-energy-progress>



billion of annual investment between 2021 and 2030 to reach universal access - and making full use of decentralised solutions. Scatec's investment portfolio is predominantly in developing countries and as such can be seen as contributing to achieving the goals of both energy access and a decarbonised energy system.

Energy storage is a key enabling technology for rolling out renewable energy further. In 2019, 2.9 GW of storage capacity were added to electricity systems globally – however this was almost 30% less than in 2018. The roll-out of storage systems is fragile and dependent on policy support.

## EU Taxonomy

The European Union has published a taxonomy to classify sustainable activities. The final taxonomy was published on March 9, 2020 and contains implementation guidance for companies and financial institutions – including technical criteria for a range of sectors<sup>2</sup>. The legislation formalising this taxonomy – the Delegated Acts – has not yet been adopted. The Taxonomy includes a number of principles including a “do-no-harm clause” and safety thresholds for various types of activities. Do-No-Significant-Harm criteria include measures such as ensuring resistance and resilience to extreme weather events, preventing excessive water consumption from inefficient water appliances, ensuring recycling and reuse of construction and demolition waste and limiting pollution and chemical contamination of the local environment.

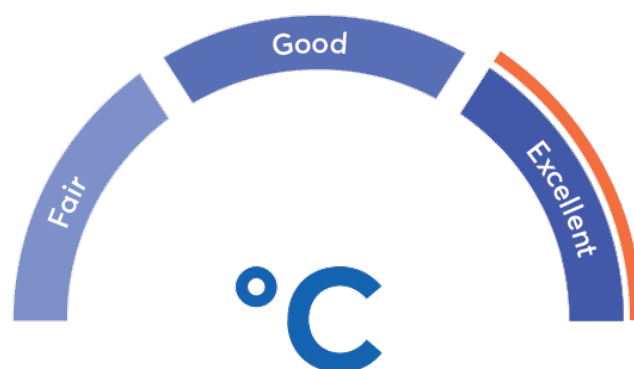
Scatec has an ongoing process with an external consultant to assess alignment with the EU Taxonomy.

## Governance Assessment

Four aspects are studied when assessing Scatec's governance procedures: 1) the policies and goals of relevance to the green financing framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

The overall assessment of Scatec's governance structure and processes gives it a rating of **Excellent**.

Scatec has set out a robust procedure for adhering to the Green Bond/Loan Principles. The selection process is well defined and includes a requirement of consensus-based decisions. Projects are screened using IFC's performance standards, the Equator Principles and the company's own ESIA process. We are impressed by the company's proactive and strong corporate sustainability engagement, as exemplified by its use of Science-Based Targets for emissions reductions and its early adoption of TCFD guidelines. In order to improve further, Scatec could consider integrating its Sustainability Report (fully) into its Annual Report and adopting Life-Cycle-Analysis when screening suppliers.



<sup>2</sup> Taxonomy: Final report of the Technical Expert Group on Sustainable Finance, March 2020. [https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy\\_en](https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy_en)



### Strengths

Scatec has strong and transparent reporting procedures. Its impact metrics are relevant and it is planning for external verification of the allocation report. Reporting on GHG emissions is according to the GHG Protocol and uses IEA grid factors. The same calculation methodology is used for corporate and project-based emission figures – a sign of best practice.

The issuer has a comprehensive view of sustainability which includes robust supply chain policies. It has put in place a supplier development programme aiming to enhance key suppliers' social and environmental performance with a focus on material issues (including scope 3 reporting on solar panels and steel structures). Suppliers are screened on ESG metrics; in 2019 this led to three suppliers being removed from Scatec's supplier list.

Scatec undertakes climate risk analysis both at corporate and project levels. Where necessary, project design is amended based on the findings (e.g., to reduce the risk of flooding) and mitigation actions are implemented. We understand that a process is underway to expand the use of climate scenario analysis – CICERO Green sees this as a positive development and one that is necessary as Scatec absorbs assets of greater complexity and new technologies.

### Weaknesses

We find no obvious weaknesses in Scatec's Green Financing Framework.

### Pitfalls

The merger between Scatec and SN Power implies the merger of sustainability assessment systems and a new set of risks as the company moves to include hydropower assets. Moreover, investments in storage assets will involve sourcing decision related to conflict minerals. The merged company will have to invest efforts in creating an ambitious and streamlined ESG management system in line with its current high ambitions.

The impact and allocation reports will to some extent be aggregated on a category basis. The purpose of the aggregation is to summarise according to the materiality principle and to facilitate investors' reading experience. However, as with all aggregation there is a risk of cherry-picking examples while underperformance may be hidden in the detail. We encourage Scatec to be as transparent as possible with their investors.

Solar photovoltaic cells can be energy-intensive to produce and CICERO Green encourages Scatec to continue scrutinising its supply chains to ensure the overall net impact of renewable power production is as high as possible. In terms of calculations of environmental impacts, it is recommended that a lifecycle approach is used to calculate the environmental and climate impacts of the project and also that calculations are performed both ex-ante and ex-post project completion. A lifecycle approach includes the calculation of impacts from production of solar power stations and components through to the recycling and/or disposal phase and provides a broader view of the impacts than pure consumer use-based impacts.

Likewise, the net GHG impact of hydropower assets is highly dependent on topographic and project-specific conditions. We encourage Scatec to continue to push for high sustainability standards for this project category as well.



# Appendix 1: Referenced Documents List

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Document Number	Document Name	Description
1	Scatec Green Financing Framework February 2021	
2	Annual Report 2019	
3	Sustainability Report 2019	
4	Scatec Solar Sustainability Policy 2019	

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## Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

