

*June 2024*

# Support to Taftie Taskforce on Net Zero Emissions



**Annex - Good practices by TAFTIE  
member agencies**



Version Click to add version number

*June 2024*

## **Support to Taffie Taskforce on Net Zero Emissions**

### **Annex - Good practices by TAFTIE member agencies**

---

Click to add names of project team members



# Table of Contents

---

1	Good practices on net zero emissions activities	1
2	Capital Investment for Decarbonisation Processes, Ireland	2
2.1	Basic information	2
2.2	About the practice	2
2.2.1	Rationale & objectives of the practice	2
2.2.2	Type of support being offered	3
2.3	Implementation & results	3
2.3.1	Organisations involved and their roles	3
2.3.2	Budget for the practice	3
2.3.3	Delivery of support to enterprises	4
2.3.4	Results and benefits	5
2.4	Experiences and lessons learned	5
3	Capital investment for Energy Monitoring & Tracking (EM & T) Systems, Ireland	6
3.1	Basic information	6
3.2	About the practice	6
3.2.1	Rationale & objectives of the practice	6
3.2.2	Type of support being offered	7
3.3	Implementation & results	7
3.3.1	Organisations involved and their roles	7
3.3.2	Budget for the practice	7
3.3.3	Delivery of support to enterprises	7
3.3.4	Results and benefits	8
3.4	Experiences and lessons learned	8
4	Sustainable investment for 4.0 2022, Italy	9
4.1	Basic information	9
4.2	About the practice	9
4.2.1	Rationale & objectives of the practice	9
4.2.2	Type of support being offered	9
4.3	Implementation & results	10
4.3.1	Organisations involved and their roles	10
4.3.2	Budget for practice	10
4.3.3	Delivery of support to enterprises	10
4.3.4	Results and benefits	12
4.4	Experiences and lessons learned	12

5	Green New Deal: Revolving Fund, Italy	13
5.1	Basic information	13
5.2	About the practice	13
5.2.1	Rationale & objectives of the practice	13
5.2.2	Type of support being offered	14
5.3	Implementation & results	15
5.3.1	Organisations involved and their roles	15
5.3.2	Budget for the practice	16
5.3.3	Delivery of support to enterprises	16
5.3.4	Results and benefits	16
5.4	Experiences and lessons learned	16
6	Energy Aid, Finland	18
6.1	Basic Information	18
6.2	About the practice	18
6.2.1	Rationale & objectives for the practice	18
	Type of support being offered	18
6.3	Implementation & results	19
6.3.1	Organisations involved and their roles	19
6.3.2	Budget for the practice	19
6.3.3	Delivery of support to enterprises	19
6.3.4	Results and benefits	21
6.4	Experiences and lessons learned	21
7	SDE++, the Netherlands	22
7.1	Basic information	22
7.2	About the practice	22
7.2.1	Rationale & objectives for the practice	22
7.2.2	Type of support being offered	23
7.3	Implementation & results	23
7.3.1	Organisations involved and their roles	23
7.3.2	Budget for practice	24
7.3.3	Delivery of support to enterprises	24
7.3.4	Results and benefits	25
7.4	Experiences and lessons learned	25
8	TSE Industry Studies, the Netherlands	27
8.1	Basic information	27
8.2	About the practice	27
8.2.1	Rationale & objectives of the practice	27

8.2.2	Type of support being offered	27
8.3	Implementation & results	28
8.3.1	Organisations involved and their roles	28
	Budget for the practice	28
8.3.2	Delivery of support to enterprises	28
8.3.3	Results and benefits	30
8.4	Experiences and lessons learned	30
9	Grants for Environmental Technology, Norway	31
9.1	Basic information	31
9.2	About the practice/scheme	31
9.2.1	Rationale & objectives for the practice	31
9.2.2	Type of support being offered	31
9.3	Implementation & results	32
9.3.1	Organisations involved and their roles	32
9.3.2	Budget for practice	32
9.3.3	Delivery of support to enterprises	32
9.3.4	Results and benefits	33
9.4	Experiences and lessons learned	33
10	Translating the EU taxonomy to agency systems; environmental technology grants, Innovation Norway	34
10.1	Basic information	34
10.2	About the practice	34
10.2.1	Rationale & objectives for the practice	34
10.2.2	Type of support being offered	34
10.3	Implementation & results	35
10.3.1	Organisations involved and their roles	35
10.3.2	Budget for practice	35
10.3.3	Implementation of the practice	35
10.3.4	Results and benefits	36
10.4	Experiences and lessons learned	36
11	Austria Climate Neutral City, Austria	37
11.1	Basic Information	37
11.2	About the practice	37
11.2.1	Rationale & objectives for the practice	37
11.3	Implementation & results	38
11.3.1	Organisations involved and their roles	38
11.3.2	Budget for practice	38



11.3.3 Delivery of support to enterprises	38
11.3.4 Results and benefits	40
11.4 Experiences and lessons learned	40

## 1 Good practices on net zero emissions activities

---

As part of this project our team developed a number of good practices in cooperation with TAFIE agencies. A request was circulated amongst members to suggest any practices they had in place regarding net zero emissions and decarbonisation, or regarding their sustainability efforts more generally. Each good practice was developed through desk research (studying available, relevant information for a practice) and where possible, an interview with the agency carrying out the practice. An overview of the good practices developed can be found in the table below.

*Table 1 Overview of good practices*

Country	Name of practice	Agency
Ireland	Capital Investment for Decarbonisation Processes	Enterprise Ireland
Ireland	Capital investment for Energy Monitoring & Tracking (EM & T) Systems	Enterprise Ireland
Italy	Sustainable investment for 4.0 2022	Invitalia
Italy	Green New Deal Italy	Invitalia
Finland	Energy Aid	Business Finland
Netherlands	SDE++	Netherlands Enterprise Agency
Netherlands	TSE Industry Studies	Netherlands Enterprise Agency
Norway	Grants for Environmental Technology	Innovation Norway
Norway	Translating the EU taxonomy to agency systems	Innovation Norway
Austria	Climate neutral city	Austrian Research Promotion Agency (FFG)

[Click to add source](#)

## 2 Capital Investment for Decarbonisation Processes, Ireland

### 2.1 Basic information

Information element	Topics to address
<b>Details of practice</b>	
Name	Capital Investment for Decarbonisation Processes
Country (and region)	Ireland, European Union
Date implemented (and ended)	Started in 2021. Open for applications until October 2025. Investment shall be completed by August 2026.
Target group	Manufacturing companies located in Ireland that have 10 or more full time employees and have been generating sales for at least 5 years.

### 2.2 About the practice

#### 2.2.1 Rationale & objectives of the practice

This practice was implemented to encourage enterprises to invest in the decarbonisation of their activities. Public authorities noted that companies were not making sufficient investments to decarbonise in line with the Paris Agreement. As such, grants were deemed necessary to make investments in low-carbon technologies commercially viable for enterprises. This instrument has been implemented as part of the larger The Enterprise Emissions Reduction Investment Fund (EERIF), for more information, see the box below.

The overall objective of this practice is to reduce the payback period of key carbon reducing technologies at plant level by incentivising enterprises to invest in and adopt these carbon reducing technologies. In so doing, the practice aims to increase the resilience of companies to climate change and incentivise them to accelerate progress towards a net carbon zero pathway.

The **Enterprise Emissions Reduction Investment Fund (EERIF)** is meant to help companies decarbonise and is funded by the National Recovery Plan. The Plan directly refers to the Climate bill which stipulates that the country should have reached neutrality until 2050 (and 51% by 2030 with respect to 2018 levels).

Another [document](#) (Department of Enterprise Statement of strategy 2023-2025) mentions employment, green and digital transformations, better working conditions, better regulatory environment, extension of Irish trade as goals. Under the green economy goal, it reads: "Assist SMEs to start their journey towards lower emissions, improved energy and resource efficiency and reduced environmental impact, including through promotion of the Climate Toolkit 4 Business online tool". I believe this practice is directly tied with that goal, even if not explicitly. Bear in mind that Enterprise Ireland is affiliated with the same department.

Moreover, this Climate Toolkit 4 Business ([link](#)) gives companies a carbon footprint estimate and recommends actions to reduce it, signposting them to other government initiatives that could help them. It uses the energy consumption of the company as an input and was developed by the government with Enterprise Ireland and IDA as partners.



### 2.2.2 *Type of support being offered*

The Capital Investment for Decarbonisation Processes instrument provides aid through grants. Grant aid is provided against the eligible costs of the project, where eligible costs are the extra investment costs in a project required to:

- go beyond EU standards for environmental protection,
- to increase the level of environmental protection in the absence of EU standards
- to achieve a higher level of energy efficiency.

Enterprises can make use of the grants for the following types of technologies in aid of their decarbonisation processes:

- Industrial Heat Pumps (including air, water, and ground source)
- Electric steam boilers
- Heat recovery technologies
- Mechanical Vapour Recompression (MVR) evaporators
- Biomass boilers\*

Small enterprises will receive grants for up to 50% of their eligible costs, mid-sized enterprises up to 40% and large ones up to 30%. The minimum size of a grant is €20,000 and maximum is €1 million. For projects larger than €50 000 the grant awarded will also be determined by the efficiency of the carbon reduction achieved by the project. A (maximum) guide grant rate of €500 per tonne of CO<sub>2</sub> abated will apply.

## 2.3 Implementation & results

### 2.3.1 *Organisations involved and their roles*

The IDA Ireland (Ireland's Foreign Direct Investment Agency), Enterprise Ireland, and Údarás na Gaeltachta (a regional authority responsible for the economic, social and cultural development of the Gaeltacht<sup>1</sup>), are jointly responsible for the instrument. The three organisations are affiliated with different branches of the government (Department of the Prime Minister, Department of Enterprise, and the Department of Tourism, respectively).

Enterprise Ireland, IDA Ireland, and Údarás na Gaeltachta administer the Enterprise Emissions Reduction Investment Fund, and the Capital Investment Monitoring Tool is a part of this fund. The three organisations administer the fund for their respective clients. Applications are assessed by Enterprise Ireland.

### 2.3.2 *Budget for the practice*

This instrument is part of the Enterprise Emissions Reduction Investment Fund ( which has a budget of €30 million), which is part of the National Recovery & Resilience Fund for a Carbon Reduction Fund. The budget for this particular practice is €26million, of which Enterprise Ireland allocates €13 million.

---

<sup>1</sup> <https://udaras.ie/en/about/what-we-do/>

### 2.3.3 Delivery of support to enterprises

Eligible enterprises must be clients of either IDA Ireland, Enterprise Ireland, or Údarás na Gaeltachta clients operating in the manufacturing sector. Enterprises apply for the grant via Enterprise Ireland and applications must contain the following elements:

- Business plan which will address the evaluation criteria ( current environmental strategy, expected environmental benefits, Project alignment with company growth, need for funding and financial robustness)
- Project plan
- Project costs workbook
- Financial Data Sheet (FDS). An FDS is required for projects where the grant assistance package being sought is €150,000 or greater
- Monthly cash flows covering 12 months from the start date of the project. It can be provided in the relevant section of the FDS or separately
- Full financial projections for the period on which the FDS projections are based
- Audited Accounts (not required if the applicant already submitted them to their Development Adviser or has availed of Audit Exemption)
- Latest available Management Accounts, including profit and loss, cashflow and balance sheet
- Three-year historic financial statements
- Organisation Chart and Group Structure<sup>2</sup>

Applications are submitted to and assessed by The following evaluation criteria are applied:

- **Current environmental strategy** – include evidence of action taken to reduce GHG emissions, improve energy and environmental performance and restore biodiversity to date. Provide Science Based Targets or absolute carbon emission reductions where possible and future targets
- **Expected environmental benefits**, energy savings and reduction in CO2 arising from the project – specific details and figures on actual and forecasted levels of annualised energy use and GHG emissions for both the company and the project(s) boundary or specific process(es)
- **Project alignment with company growth strategy** - Demonstrate that the investment is strategic for the company and will drive long term competitiveness and sustainable growth. Evidence of customer demand for sustainability investment as part of production processes
- **Need for funding** - Demonstrate the need for a minimum level of State investment and the extent to which the investment project would be impacted by State funding through one or more of the following: project size, payback period, scope, and/or speed
- **Financial robustness** - Company has a satisfactory financial track record potentially including a proven track record in implementing previous State funded projects in a satisfactory manner

---

<sup>2</sup> <https://www.enterprise-ireland.com/documents/capital-investment-for-decarbonisation-processes-reference-document-en-95110.pdf>

#### 2.3.4 Results and benefits

[No results available at the time of writing, June 2026]

### 2.4 Experiences and lessons learned

A number of key lessons were learned throughout the process:

- Having access to expertise is key. Expertise may be externally or internally sources but having it and involving expertise in project design and implementation is key. It is then also important to keep developing that expertise further. This applies to all instruments under the EERIF.
- External assessment committee (for larger project applications): this was a product of needing expertise to assess such applications but not having the capacity within Enterprise Ireland to do so. However, given the importance of having proper, sufficient expertise available, an external committee was set-up for the large-scale projects, as these are assessed via a committee anyway.
- This insight also translated to setting up a panel of expertise for a separate, environmental aid fund. This panel consisted of approximately 8 consultants, who were experts in energy, renewable energy, and decarbonisation.
- Furthermore, engaging properly with key stakeholders was found to be important. Enterprise Ireland engaged internally with other departments and externally with other relevant actors, including the Sustainable Energy Authority Of Ireland (SEAI). This was especially important for awareness and for alignment between departments and organisations and ensuring that projects are relevant and effective.
- Finally, there was a recognition between the agencies that it was necessary to drive and fund enterprises to scale up their decarbonisation efforts but also a need for agencies to scale up their support to enterprises. When enhancing support to enterprise it was important to be aware of actions taken by other agencies to complement the various efforts being made rather than to duplicate efforts.

## 3 Capital investment for Energy Monitoring & Tracking (EM & T) Systems, Ireland

---

### 3.1 Basic information

Information element	Topics to address
<b>Details of practice</b>	
Name	Capital investment for Energy Monitoring & Tracking (EM & T) Systems
Country (and region)	Ireland, European Union
Date implemented (and ended)	Started in 2021. Open for applications until October 2025. Investment shall be completed by August 2026.
Target group	Manufacturing companies located in Ireland that have 10 or more full time employees and have been generating sales for at least 5 years.

### 3.2 About the practice

#### 3.2.1 Rationale & objectives of the practice

This practice was established to enable energy savings and to act as an early warning system that can improve productivity, quality, and decision making. The practice also aimed to address the lack of awareness among companies about their energy consumption. This practice has been established within a larger policy framework, namely through the Enterprise Emission Reduction Fund (EERIF); more information can be found below in the box.

The objective of this practice is to support companies to put in place energy monitoring and tracking systems to begin accounting for the carbon footprint of their activities.

The **Enterprise Emissions Reduction Investment Fund (EERIF)** is meant to help companies decarbonise and is funded by the National Recovery Plan. The Plan directly refers to the Climate bill which stipulates that the country should have reached neutrality until 2050 (and 51% by 2030 with respect to 2018 levels).

Another [document](#) (Department of Enterprise Statement of strategy 2023-2025) mentions employment, green and digital transformations, better working conditions, better regulatory environment, extension of Irish trade as goals. Under the green economy goal, it reads: "Assist SMEs to start their journey towards lower emissions, improved energy and resource efficiency and reduced environmental impact, including through promotion of the Climate Toolkit 4 Business online tool". I believe this practice is directly tied with that goal, even if not explicitly. Bear in mind that Enterprise Ireland is affiliated with the same department.

Moreover, this Climate Toolkit 4 Business ([link](#)) gives companies a carbon footprint estimate and recommends actions to reduce it, signposting them to other government initiatives that could help them. It uses the energy consumption of the company as an input and was developed by the government with Enterprise Ireland and IDA as partners.

### 3.2.2 *Type of support being offered*

Enterprises can make use of this instrument and receive grants for supporting the development of metering systems. Specifically grants can be used to cover costs of hardware for a new metering system (for energy, gas, diesel, oil, water, steam) loggers and reasonable installation and commissioning costs.

The minimum eligible expenditure for enterprises is €10,000, while the maximum is €100,000. Enterprise Ireland then covers up to 50% of the costs, or in monetary terms, provides a minimum grant aid of €5000 up to a maximum of €50,000.<sup>3</sup>

## 3.3 **Implementation & results**

### 3.3.1 *Organisations involved and their roles*

The IDA Ireland (Ireland's Foreign Direct Investment Agency), Enterprise Ireland, and Údarás na Gaeltachta (a regional authority responsible for the economic, social, and cultural development of the Gaeltacht<sup>4</sup>), are jointly responsible for the instrument. The three organisations are affiliated with different branches of the government (Department of the Prime Minister, Department of Enterprise, and the Department of Tourism, respectively).

Enterprise Ireland, IDA Ireland, and Údarás na Gaeltachta administer the Enterprise Emissions Reduction Investment Fund, and the Capital Investment Monitoring Tool is a part of this fund. The three organisations administer the fund for their respective clients. Applications are assessed by Enterprise Ireland.

### 3.3.2 *Budget for the practice*

The budget for the Enterprise Emissions Reduction Investment Fund or EERIF (€30 million), which is part of the National Recovery & Resilience Fund for a Carbon Reduction Fund. This instrument forms a part of the EERIF. The budget for this instrument, the Capital Investment for Energy Monitoring and Tracking is €2million. For the instruments under the EERIF, 2 to 3 people are usually needed to implement a programme.

### 3.3.3 *Delivery of support to enterprises*

The fund operates on an open call basis. There is a set amount of funding available under this scheme and therefore, it may not be possible to award aid to all eligible projects. I guess that means it is on a first-come first-serve basis.

To make use of the instrument, enterprises must be located in Ireland, have 10 or more full time employees, and have been generating sales for at least 5 years. The applicant should also be a client of Enterprise Ireland, IDA Ireland or Údarás na Gaeltachta, and comply with the “Do no significant harm” Technical guidance (2021/C58/01). Specifically, the following types of projects are not eligible:

- activities related to fossil fuels, including downstream use,
- activities under the EU Emission Trading System (ETS) achieving projected greenhouse gas emissions that are not lower than the relevant benchmarks,
- activities related to waste landfills, incinerators and mechanical biological treatment plants<sup>4</sup>

<sup>3</sup> Enterprise Ireland (2022), Enterprise Emissions Reduction Investment Fund – Energy Monitoring and Tracking Systems

<sup>4</sup> <https://udaras.ie/en/about/what-we-do/>

- activities where the long-term disposal of waste may cause harm to the environment.

Once an application is received, Enterprise Ireland performs an assessment, basing its evaluation on:

- The proposal being in keeping with the aims and terms of the fund
- The eligible costs being in line with the terms of the fund - How the plan is an integral part of the strategic development plan of the company, including its sustainability strategy
- The financial track record of the company
- The development needs of the company
- The overall amount of State funding received by the company in the last seven years
- Previous track record in implementing any previously State funded projects
- Compliance of the project with DNSH requirements

#### 3.3.4 *Results and benefits*

[No results available at the time of writing, June 2026]

### 3.4 Experiences and lessons learned

A number of key lessons were learned throughout the process:

- A challenge for practices under the EEIR was how to engage companies more; enterprises have so many different priorities on both the short and the long-term and sustainability is not always a top priority.
- For this instrument, the electricity prices and large capital needed to support projects were a challenge.
- Having access to expertise is key. Expertise may be externally or internally sources but having it and involving expertise in project design and implementation is key. It is then also important to keep developing that expertise further. This applies to all instruments under the EERIF.
- Furthermore, engaging properly with key stakeholders was found to be important. Enterprise Ireland engaged internally with other departments and externally with other relevant actors, including the Sustainable Energy Authority Of Ireland (SEAI). This was especially important for awareness and for alignment between departments and organisations and ensuring that projects are relevant and effective.
- Finally, there was a recognition between the agencies that it was necessary to drive and fund enterprises to scale up their decarbonisation efforts but also a need for agencies to scale up their support to enterprises. When enhancing support to enterprise it was important to be aware of actions taken by other agencies to complement the various efforts being made rather than to duplicate efforts.

## 4 Sustainable investment for 4.0 2022, Italy

---

### 4.1 Basic information

<b>Details of practice</b>	
Name	Sustainable investments 4.0
Country (and region)	Italy
Date implemented (and ended)	Opened yearly until depletion of financial resources
Agency involved	Invitalia
Responsible organisation	Ministry of Enterprises and made in Italy
Target group	micro, small and medium-sized enterprises

### 4.2 About the practice

#### 4.2.1 Rationale & objectives of the practice

This programme has a dual policy rationale:

1. to overcome the pandemic crisis (which highlighted the need for more digital development) by supporting technological and digital transformation of SMEs and
2. to overcome the territorial gaps between North and South.

The practice was established out of the need to foster transition to a more digital, circular and energy efficient economy. The measure represents the upgrading of a structural financing intervention, that builds upon previous instruments dedicated to investments promotion goals. In particular, the current measure is the result of the orientation of a previously existing instrument (called "Innovative machineries"), to contribute to the Italian 4.0 Transition Programme. The Ministry of Enterprises and the Made In Italy label established this programme, and Invitalia is the managing body implementing the measure.

The objective of the practice is to encourage the technological and digital transformation of businesses, in order to overcome the contraction induced by the pandemic crisis and direct the recovery of investments; the ultimate goal is to push investments with high technological content towards strategic areas for competitiveness and sustainable growth.

#### 4.2.2 Type of support being offered

The programme offers grant-based funding which covers a maximum percentage of the project expenses on a "first-come, first-serve basis". Maximum percentages range between 60% to 35% for small and micro businesses and 50% to 25% for medium sized business. Higher aid intensities are granted for projects in Southern Italy, compared to Northern Italy, to bridge the gap in development.

The practice provides funding for the following aspects and activities:

- Machinery and/or plant equipment
- Works connected with the investments in new technologies
- Computer programs and licenses

- Acquisitions of environmental management or energy efficiency system certifications and environmental product certifications, relating to the production line covered by the investment program.
- Consultancy services aimed at improving a company's energy efficiency

Projects that contradict the DNSH principle on European level are explicitly barred from participating, on the basis of an approach that include and exclusionary list coherent with InvestEU and conformity with national and European applicable environmental law.

Eligible investments must be of innovative nature, as they must include 4.0 technological content; they must be directed to the extension of an existing establishment, diversification of the output of an establishment into new additional products, or a fundamental change in the overall production process of an existing establishment, (the very first release included a new establishment as well, that have been surpassed to better focus the measure on sustainability improvements).

### 4.3 Implementation & results

#### 4.3.1 Organisations involved and their roles

The Ministry of Enterprises and Made In Italy are responsible for this practice, and Invitalia provided advisory in setting the scheme. Invitalia is now the managing body that implements the practice.

#### 4.3.2 Budget for practice

The measure combines miscellaneous sources of financing, such as REACTEU via the National Operation Programme – Enterprises and Competitiveness, complementary national funds, and revolving resources from financial instruments under previous EU Structural Funds programming cycles.

The initial endowment for this programme was €678 million, which was subsequently increased to €809 million<sup>5</sup> (€131 million added for the Northern and Central regions, given the appeal of the measure).

- 37% of the resources are allocated to the Central - Northern Regions, drawing on the resources of the "REACT - EU" initiative allocated to priority Axis VI of the National Operational Program "Enterprises and competitiveness" 2014-2020; total of €381 million: initial amount equal to €250 million + refinancing of €131 million.
- 63% is allocated to the Southern Regions. €338 million come from the complementary program "Enterprises and competitiveness" and €90 million come from the National Operational Program (PON) "Local Entrepreneurial Development" 2000-2006 for a total of €428 million.
- 25% of the funding must go to small and micro enterprises..

#### 4.3.3 Delivery of support to enterprises

The measure is a rolling fund and operates on a "first come, first serve basis". The support which enterprises receive takes the form of a grant. The companies apply for financing via the Invitalia

---

<sup>5</sup> <https://www.mimit.gov.it/it/incentivi/investimenti-sostenibili-4-0>



website. There is a form to fill out and certain certification was required too to be compliant with environmental purposes of the measure.

**Applications** are submitted on the Invitalia via the Invitalia website. Applicant SMEs must adhere to the following eligibility criteria:

- Be a functional SME located in Italy. Multiple requirements related to solvency, have submitted tax statements, comply with worker protection regulations, (and other such on the environment, urban planning, etc.)
- Not have relocated the production facility that is receiving financing in the 2 years preceding the project
- Not relocate the production facility in the 2 years after the completion of the project.

**Assessment criteria:** a maximum of 100 points can be scored for an application; the minimum threshold to be allowed is 35:

- Up to 32 points are given for the characteristics of the company that applies – financial liability, margins, etc.
- Up to 28 points are given for proposal quality. Calculated on the basis of the ratio between the amount of investment allowed falling into the technological typologies referred to in Annex 1 and the total amount of the proposed investments. Ratio of 1 gives full points.
- Up to 10 points for technical feasibility. Defined as ratio between the total amount of investments admitted accompanied by adequate estimates and the total amount of investments allowed. Ratio of 1 gives full points.
- Up to 10 points for economic sustainability. Ratio given by the gross operating margin and permitted investments. Ratio > than 0.25 gives full points
- Up to 20 points for environmental sustainability of the investment program. Points are given per category (see below) and no criteria are given within the categories. I presume it is up to the appraisers of Invitalia to decide if proposal fits.

**Environmental categories.** All of the environmental categories below give 6 points to an applicant's score, except the last category which gives 3:

- A program aimed at encouraging the company's *transition towards the circular economy paradigm*
- A program aimed at improving the *energy sustainability* of the company
- A contribution to *achieving the climate objectives set by the EU*
- Adhesion, on the date of submission of the application, to an *environmental management system*

From the list of mandatory documents for submitting an application:

- An investment plan (there were other minor bureaucracy things, like anti-mafia statements and the like)
- (for programs that contribute to the achievement of the climate objectives set by the European Union) sworn appraisal, issued by a qualified technician, certifying the ability of the investment program to contribute to the achievement of one or both of the climate objectives "mitigation of climate change" and "adaptation to climate change".

A further note about the assessment of applications under the measure is that project sustainability gives premium scoring to access funding. The use of certification was implemented to make applications and their assessments smoother and more efficient, for

both the agency and beneficiary enterprises. To be eligible for the sustainability premium scoring, enterprises must provide a certification from a specialised and qualified technicians, entitled by means of registration to a national list; certification must be shown for one of the specific topics that are part of the application process, for example, for the fulfilment of the criteria I (energy saving), L (climate targets set by the EU), and M (environmental product certification).

Invitalia then checks the presence of the necessary certification to score the premium requested under application. Certification is needed to adhere to these criteria (rather than explaining how an enterprise does this).

Invitalia has supported the Ministry in designing the measure. The Ministry has tried to balance needs for effective evaluation with the need to not overload the enterprises and the funding agency. The reason for requesting certification for some of the criteria is to ensure a smooth, and efficient assessment, and so doing ensures that enterprises get financing. Some domains are easier to assess, such as energy efficiency which can be more easily quantified and measured.

#### 4.3.4 *Results and benefits*

Companies performed quite well in the sense that the majority of the applications were approved. There were 1,462 proposals and 1,115 passed first set of criteria. Currently, there are 1,073 ongoing projects for total eligible expenses equal to €1,935,841,067.

#### 4.4 **Experiences and lessons learned**

The window for the presentation of the proposals stayed open just one day: in the previous week the enterprises had the possibility to upload and modify a proposal draft. The evaluation of all 1,400+ proposals took five days. For the evaluation to be so fast, the “certification approach” was fundamental: evaluators had to just check a) formal aspects linked to the certification and b) the coherence between investment plan and the other documentation.

A challenge is that the support market for circular economy is not well-developed, nor is the establishment of suitable assessment criteria which can be applied.

There is a broader lesson here which can be reflected on with other agencies. This relates to the fact that the current economic theory which underlies much economic policy and consequently, the way in which enterprise support programmes are designed and assessed, often focus on concrete outputs and growth. However, circular economy reason focuses on continuity, reusability and is a much broader and more diffuse area than for instance, net-zero of energy efficiency topics. Consequently, providing support for enterprises to work towards circular economic activities is very challenging.

## 5 Green New Deal: Revolving Fund, Italy

---

### 5.1 Basic information

<b>Details of practice</b>	
Name	Green New Deal: Revolving Fund (FRI)
Country (and region)	Italy
Date implemented (and ended)	Applications opened on 17 November 2022
Agency involved	Invitalia
Responsible organisation	Ministry of Enterprises and Made in Italy (Mimit) Joint regulation with Ministry of Economic Affairs and Finance (Mef) Co-financing by national promotion institute Cassa Depositi e Prestiti (CDP) and national private banks, upon agreement between Mimit-CDP-ABI (national banking association)
Target group	Companies of any size carrying out industrial, agro-industrial, artisan, industrial services, and research centre activities, presenting projects individually or jointly.

### 5.2 About the practice

#### 5.2.1 Rationale & objectives of the practice

The Italian New Green Deal was adopted in December 2019 by the Italian Parliament<sup>6</sup>. With the Italian Green New Deal, national authorities launched a comprehensive financing initiative for sustainable development projects, including a set of three interventions:

1. guarantees and equity measures financed by ETS auctions;
2. subsidized financing under FRI financed by postal savings;
3. self-employment measures co-financed by regions and ESIF funding.

The intervention hereby presented is part of this systemic action for sustainable development; it refers in particular to line 2) of the Green New Deal Programme and the revolving fund. This fund, the FRI, is intended to provide grants to the projects of companies admitted to subsidized financing combined with private bank loans. The measure is carried out within the Sustainable Growth Fund (FCS).

The instrument, the FRI, aims to overcome market failures in innovation financing to address sustainability objectives. The rationale of FRI financing is to promote junction of financing supply and demand with a systemic approach:

---

<sup>6</sup> The measure for R&D&I projects under the Sustainable Growth Fund (FCS) is established in the framework of a comprehensive financing Programme adopted by law n. 160 on 27 December 2019 by the Italian Parliament, called the Italian Green New Deal.

- on the supply side, FRI mobilizes private resources for public investments, in the form of State-backed postal savings that are collected by FRI which delivers loans in combination with private banks credit;
- on the demand side, it promotes projects which contribute to policy objectives, by providing FRI subsidized loans and FCS grant funding.

As regards policy objectives, FCS-FRI financial incentives delivered under the Green New Deal follow a mission-oriented approach. Support is provided for the implementation of research, development, and innovation projects responding to the ecological and circular transition challenges of the New Green Deal Programme as a whole, with particular regard to:

- decarbonization of the economy
- circular economy
- reducing the use of plastic and replacing plastic with alternative materials
- urban regeneration
- sustainable tourism
- adaptation and mitigation of local risks resulting from climate change

### 5.2.2 Type of support being offered

The FRI (*Fondo rotativo per il sostegno alle imprese e gli investimenti in ricerca*), is a revolving fund supporting enterprises and investments in research in combination with private banking loans. FRI funding endorses a remarkable and important purpose of including the banking sector and private savings in the process.

The FRI is financed by postal savings (that is, private savings held by postal banks) under the administration of the national development bank, Cassa Depositi e Prestiti, backed by state guarantees under the supervision of the Ministry of Economy and Finance.

The FRI Green New Deal measure offers financial support to enable:

- industrial research and experimental development activities (under GBER article 25) and
- for SMEs, industrialization of the results of research and development (under GBER article 17 and 18).

The financial support has three combined elements:

1. Bank loan (for at least 20% of project eligible costs) from private banks affiliated with FRI;
2. Subsidized loan (for 60% of project eligible costs) under FRI from the national promotion institute CDP (Cassa Depositi e Prestiti);
3. Grant contribution (up to 15% of project eligible costs for R&D and innovation consultancy, and up to 10% of project eligible costs for industrialisation investments).

The FRI revolving fund provides soft loans at 0,5% nominal interest rate up to 15 years amortisation including 4 years pre-amortisation. The rate applied to the portion of the bank loan is agreed between the financing bank and the beneficiary based on the trend of market rates.

FRI Green New Deal incentives are offered through two distinct support procedures:

1. One-stop shop, for programs amounting to no less than 3 million and no more than 10 million euros, with a maximum of three participating companies;

2. Negotiation, for programs of amounts exceeding 10 million and not exceeding 40 million euros, with a maximum of five participating companies.

Investments for industrialization (SME only) must have a high content of innovation and sustainability and must be aimed at diversifying the production of a plant through additional new products or at radically transforming the overall production process of an existing plant. They can be integrated with the R&D programme or regard the implementation of early industrial development of R&D results already available to the beneficiary SME (previous R&D or licensing acquired).

The FCS-FRI Green New Deal is a long-term credit line that has been set to encourage large and multi-national companies to become aware that financing is available for sustainable innovation, and to allow them to plan the use of these funds in ambitious market-oriented research activities that address sustainability objectives; nevertheless, as mid-sized and consortia projects are eligible, SMEs research and industrialisation projects can be targeted as well.

### 5.3 Implementation & results

#### 5.3.1 Organisations involved and their roles

FRI Green New Deal is a systemic action that merges funds from different sources and entities. As such it is managed and implemented in the framework of a complex governance system, with different levels and responsibilities.

The **upper governance** involves the Italian Ministries for Enterprises and made in Italy (Mimit) and for Economic Affairs and Finance (Mef), which established by joint decree 01/12/2021 the rules of the measure and allocated overall financial resources.

The instrument is administered by the Mimit Directorate General for Incentives (DGIAI) – VI Division, acting as management office. The DGIAI coordinates the execution of the measure and issues financing acts. In order to implement the measure, DGIAI avails itself of an advisory partnership with Invitalia for programming and design, and of a managing body that is the partnership of operators led by Invitalia subsidiary Banca del Mezzogiorno-Medio Credito Centrale (MCC).

The **managing body** coordinated by MCC comprises the national research council (CNR), and private banks Intesa Sanpaolo, Artigiancassa MPS Capital Services Banca per le Imprese SpA, UniCredit and Banco di Sardegna. The managing body is entrusted with the scientific and technical appraisal and control of projects – under the responsibility of CNR – and with administrative obligations regarding the evaluation of eligibility of beneficiaries and expenditure, the State aid calculation, the provision of benefits, monitoring project implementation and carrying out checks and controls on eligible expenses – under the responsibility of MCC and partner banks<sup>7</sup>.

FRI funding is run by a complex governance system with a strong set of rules regarding the provision of funding through the different sources of financing.

---

<sup>7</sup> <https://www.mimit.gov.it/index.php/it/normativa/decreti-direttoriali/decreto-direttoriale-23-agosto-2022-green-new-deal-termini-e-modalita-di-presentazione-delle-domande>

FRI funds are under the **financial administration** of the national promotion institute Cassa Depositi e Prestiti (CDP), which collects financing from post savings collected by the offices of the national operator Poste Italiane, under supervision and guarantee of Mef.

Financing operations of FRI funding operations are run by affiliated private banks, under a framework agreement signed between Mimit-DGIAI, CDP and the national banking association (ABI) upon no objection by Mef.

Affiliated private banks undertake the financial assessment of applicants, preliminary to funding applications. FRI soft loan and private banks loan are merged in a comprehensive financing that is regulated by a single contract, subject to positive technical and administrative evaluation of the projects, issuance of DGIAI financing acts and financing deliberation by CDP and private banks themselves.

### 5.3.2 *Budget for the practice*

The budget for the support offered via this practice is broken down as follows:

- 600 million euros for the granting of subsidized loans given by CDP, of which:
  - 300 million allocated to projects that access the one-stop procedure;
  - 300 million allocated to projects that enter the negotiation procedure.
- 150 million euros for non-repayable grants, of which:
  - 75 million allocated to projects that access the one-stop procedure;
  - 75 million allocated to projects that enter the negotiation procedure.

### 5.3.3 *Delivery of support to enterprises*

Projects eligible to FRI financing that applied for Green New Deal funding are still under technical and administrative eligibility appraisal, so there is little space for results and impact assessment.

Data on applications show limited numbers in funding requests (as of the time of reporting in June 2024). Funding operations expected I semester 2024 for about 10% of available funds. Focus on projects under €10 million in size.

### 5.3.4 *Results and benefits*

One of main benefits of the Green New Deal as a Programme is that it offered a systems level approach established by law to support enterprises on their sustainability investments and activities.

Since 2014, FRI funded measures for sustainable industry were set within Ministry of Economic Development. Possible risk comprises overlapping of the different measures of the Programme, and policy coordination between the authorities involved. No comprehensive evaluation or data available at present date.

As regards overcoming market failures through the specific measure, as described above (see Rationale), policy orientation is clear and strong: FCS-FRI permanent facility combines the mobilization of State-backed post savings and private banking with public grants in order to enable access to finance and address innovation funding failures (risk adversity, asymmetric information, coordination failures).

## 5.4 **Experiences and lessons learned**

A number of **insights and lessons** have been generated throughout the development and implementation:

- A success factor of the permanent funding framework of FRI established a systemic approach to access to finance failures and innovation funding issues. By including two ministries, a national development bank, and the (local) banking sector, the agency and its subsidiary, and the national research council the measure brings together a variety of organisations to design, implement and monitor the FRI. However, this attribute does lead to administrative complexity and long lead time to implementing steps.
- Another success factor is integrating grants and different loans – soft loans, bank credit. Programmes implemented in the past using the same vehicle yielded good results. However, evidence above highlights that now on FRI Green New Deal shows quite low use compared to similar programmes from the past. This is a challenge which the governing organisations are reflecting on. On the supply side, grant rate (up to 15%) may prove to be not appealing, compared to other instruments dedicated to green transition that rely on higher grant intensity and do not imply the complexity of the access to finance structure; on the demand side, FRI entry level (€3 million project), which also requires a preliminary financial viability deliberation by banks, might not be met by several enterprises, especially SMEs with limited collateral to guarantee the loans.
- A good consequence of the FRI mechanism and of the banks deliberation as preliminary requirement is that the calls for the revolving fund are open for a longer period of time, so that enterprises can incorporate public facilities in R&D investment strategies and activities. FRI is a patient funding measure, that is a good point for a long-term perspective on sustainability.
- As regards policy implementation, FRI Green New Deal provides a very clear set for the integration of sustainability approaches in projects selection: exclusionary list, no significant harm, taxonomy-oriented eligibility requirements are incorporated in the selection process. The implementation of the measure will tell us if companies are ready for that.

This kind of financing raised wide interest in past, but lesser not now that we are in the middle of the green transition. One possible explanation refers to policy scenario, because there is greater budget and number of support instruments available for enterprises and sustainability activities.

Another question can be: if we have ambitious objectives for sustainable transformation, a soft loan might not be enough, as other instruments could be considered as preferable.

Provided that the concept of mobilising credit finance for green transition is remarkable, a further reflection is that it is worth exploring where exactly the market failures occur when offering support for sustainability (and net zero) to enterprises: What do green companies need? Which are the alternatives available to them? Is soft loan fit for all sustainability ambitions? Is banks' financial assessment suit for new models and green companies' fundamentals (i.e. energy saving and circularity cash flows)?

Nevertheless, in rapidly changing times, for a comprehensive balance of the measure major macroeconomic changes – ongoing and upcoming – need to be taken into consideration. Rising interest rates may lead to greater propensity towards soft loan facilities; public finance restrictions may reinvigorate the interest of the market for soft loan-grant combination; the exhaustion of post-Covid recovery measures and cooling down of resource allocation may give momentum for long term systemic measures addressing financial markets failures.



## 6 Energy Aid, Finland

### 6.1 Basic Information

<b>Details of practice</b>	
Name	Energy Aid
Country (and region)	Finland
Date implemented (and ended)	2022 - 2026
Agency involved	Business Finland
Responsible organisation	Business Finland
Target group	Enterprises in Finland

### 6.2 About the practice

#### 6.2.1 Rationale & objectives for the practice

The measure “Energy aid” is being delivered by Business Finland to promote the investment in and use of renewable energy and increase energy efficiency and infrastructure. The scheme is designed in line with the Sustainable Growth Programme for Finland, to reach the national goals to reduce greenhouse gas emissions, and to support the country’s 2035 carbon neutrality target. Finland’s Recovery and Resilience Plan is the national plan for utilising the funding from the EU’s Recovery and Resilience Facility (RRF). The Plan is part of the Sustainable Growth Programme. By focusing on projects involving new technologies, the programme’s goal is to achieve wider impacts, such as positive externalities, that go beyond the direct energy or climate effects of individual projects.

Strategic objectives of “Energy aid”:

- Promote the development of innovative solutions for replacing the energy system with low-carbon alternatives in the long term.
- Reduce the technological and economic risks associated with investments in energy infrastructure and the electrification and decarbonisation of industry.

#### Type of support being offered

To achieve this, Business Finland is providing financial support of at least €10,000 for energy efficiency projects, and EUR 30K for renewable energy projects. The funding is provided as an aid and does not need to be repaid. Energy aid can be used for investments that increase the use or production of renewable energy or to promote energy-saving investments.<sup>8</sup> Specifically, Energy Aid can be used for:

1. Investment projects that invest in fixed assets, or
2. Energy audits, which are Motiva-type energy audits, targeted audits (pilot) and municipal renewable energy audits

<sup>8</sup> <https://www.businessfinland.fi/en/for-finnish-customers/services/funding/energy-aid>



Either must promote the production and use of renewable energy, energy saving, more efficient production, or utilization of energy, or otherwise contribute to a low-carbon energy system in the long term. The aid must have a significant impact on launching the project. Aid will only be granted to projects that would not be implemented without the aid.

## 6.3 Implementation & results

### 6.3.1 Organisations involved and their roles

Business Finland is a Finnish government organization dedicated to fostering innovation, internationalization, and the growth of businesses in Finland. With a mission to drive economic growth and global competitiveness, Business Finland offers a range of services and support to Finnish companies, startups, and research institutions. It provides funding, expert guidance, and international networking opportunities to help businesses innovate, expand globally, and invest in research and development. It is affiliated with the ministry of Economic Affairs and Employment.

### 6.3.2 Budget for the practice

The budget for this practice is set at the political level. In 2024 the budget allocated for this practice by the Ministry of Economic Affairs and Employment was €14.1 million<sup>9</sup>.

### 6.3.3 Delivery of support to enterprises

Business Finland is responsible for the calls and application assessments. They will make aid decisions for projects related to electrification and decarbonisation of industrial processes where the eligible costs are less than EUR 5 million. The Ministry of Economic Affairs and Employment will make aid decisions for projects where the eligible costs exceed EUR 5 million. Energy aid payments are made by the authority mentioned in the decision to grant aid based on progress in the project and the accounts presented by the aid recipient. The schedule for aid decisions depends on the number of applications and the need for processing.

Aid percentages differ for different energy and company categories, as below:

- Renewable technologies:
  - Heat pump projects, 15%
  - Solar heat projects, 20%
  - Landfill gas projects, 15%
  - Small wind power projects, 20%
  - CHP projects (<1 MWe), 15%
  - Solar electricity projects, 15%
  - Biogas projects, 25%
  - Renewable energy audits in the municipal sector, 50%
  - Biogas projects should not use logs or pulpwood; Investments related to refining, liquefying, transporting, distributing, or using biogas will only be eligible for aid if accompanied by an investment in new reactor capacity

---

<sup>9</sup> Finnish Government, (2024), Ministry of Economic Affairs and Employment sets energy aid priorities for 2024, <https://valtioneuvosto.fi/en/-/1410877/ministry-of-economic-affairs-and-employment-sets-energy-aid-priorities-for-2024>

- Energy efficiency aid percentages:
  - 20% for companies and communities that have entered into energy efficiency agreements.
  - 25% when the ESCO service is used in the above<sup>10</sup>
  - 15% for companies and communities other than those that have entered into energy efficiency agreements when the ESCO service

The **application** processes (two so far) have taken place through the Business Finland 'online services' portal, with the second call ending in May 2023.

An explicit condition for application is to submit a business plan that should contain:

- A brief description of organization's activities, ownership, key performance indicators, and description of the property or production process being invested in
- Description, technical specification, and cost specification of the investment
- Objectives of the investment with numerical values and profitability calculation (repayment period)
- Information on the governmental permits related to the investment (e.g., building permit, environmental permit, etc.)
- Other data should be supplied as well, but entirely related to the energy performance of the project.

An **eligible** organisation for this grant is defined as a community or company that is not a farm, and i) is not active within the framework of fisheries or aquaculture products, ii) is not a housing company or residential property, iii) does not receive funding from the state budget.

Aid is not granted for projects launched before the aid decision is made. At the earliest, the aid can be granted to cover costs arising as of the date of the funding decision.

The energy aid is paid based on the actual costs reported by the organization. The investment costs of the project must be at least EUR 10,000 (energy efficiency) or EUR 30,000 (renewable energy), and there is no upper limit on the size of the project.

The eligibility for the second call stated that the projects must fit the following investments under the first pillar of Finland's Recovery and Resilience Plan, and must be completed by 30 June 2026:

1. Investments in energy infrastructure (P1C1I1)
2. Direct electrification and decarbonisation of industrial processes (P1C2I2):

Here, only such energy infrastructure projects that have eligible costs of over EUR 5 million were processed. As regards electrification or decarbonisation of industry, applications may be submitted for projects with eligible costs exceeding EUR 1 million.

The granting of aid is **assessed** by Business Finland (or Ministry of Economic Affairs and Employment for projects over EUR 5 mill) based on a comparison of applications by investment

---

<sup>10</sup> ESCO: service business in which an external energy expert implements investments and measures in the customer company to improve the use of energy and save energy. The costs of the service, including the energy saving investment, are paid with the savings resulting from reduced energy costs

type. In overall consideration, the impact of investments on the objectives of Finland's Recovery and Resilience Plan will be assessed. Particular attention will be paid to:

- impacts on energy and emissions,
- cost-effectiveness,
- feasibility,
- novelty value of the technology included in the projects,
- replicability of a technology or project, and
- other effects of the projects.

Priority is given to projects involving new technology (first commercial application or one of first implementations), and where eligible costs exceed EUR 5 million.

#### 6.3.4 Results and benefits

In 2018, the agency granted 458 energy aid projects and a further 684 in 2019 amounting to €23 million and €30million in grants respectively.<sup>11</sup>

Information from 2021 on the practice shows that the Energy Aid instrument amounts for 18% of Finland's public funds for energy investments. Of the €393 million provided in grants, around €270 million was directed to renewables and €123million to energy efficiency. Enterprises reportedly benefit from energy efficiency, lower energy costs, smaller carbon footprint and a better corporate image<sup>12</sup>.

## 6.4 Experiences and lessons learned

The practice has also been examined by EU sources. These sources identify a number of lessons for other organisations, including<sup>13</sup>:

- The support provided to applicants,
- The recruitment of new experts and re-organising existing people to make necessary expertise available,
- Develop concrete tools for examining and justifying the investments involved for different projects, including energy audits (comprehensive reports on energy consumption and saving potential), and carbon footprint calculations for products, services, and organisations.
- Providing online services, such as application portals and for the management of a project during its life cycle
- Adapting key assessment criteria into concrete terms, such as estimated energy savings and the reduction of carbon dioxide emissions.

---

<sup>11</sup> [https://static.eurofound.europa.eu/covid19db/cases/FI-2018-1\\_2718.html](https://static.eurofound.europa.eu/covid19db/cases/FI-2018-1_2718.html)

<sup>12</sup> <https://www.interregeurope.eu/good-practices/energy-aid-finland>

<sup>13</sup> Interreg Europe, (2021), Energy Aid, Finland , <https://www.interregeurope.eu/good-practices/energy-aid-finland#evidence-of-success>

## 7 SDE++, the Netherlands

---

### 7.1 Basic information

<b>Details of practice</b>	
Name	Stimulation of Sustainable Energy Production and Climate Transition (SDE++)
Country (and region)	The Netherlands
Date implemented (and ended)	2020 (in its current form, the programme has existed in various configurations since 2011). The SDE++ replaced the SDE+
Agency involved	RVO
Responsible organisation	Ministry of Economic Affairs and Climate
Target group	Companies and organisations (non-profit and otherwise) in sectors such as industry, mobility, electricity, agriculture, and the built environment.

### 7.2 About the practice

#### 7.2.1 Rationale & objectives for the practice

The SDE+ programme has been running since 2011 (and its predecessor, the SDE programme since 2008), and offered support for projects in wind on land, biomass fermentation, burning and gasification of biomass, waste incineration plants, energy from water and solar PV technologies. In the years that followed, other technological areas were added.

The instrument in its current form, the SDE++, was designed in response to the Dutch Climate Accord of 2019, which contains a number of climate objectives for specific sectors. For actors in these sectors to achieve those goals, support from the government was considered necessary; innovation and change of this nature and scale does not happen by itself was the rationale. The RVO and Ministry examined which instruments were already in place and which could be adapted to help sectors achieve the climate goals. The SDE programme, which was already in place was deemed an appropriate instrument to expand so that organisations can now request support for electrification (using water pumps or e-boilers for instance).

The objective of this practice is to develop renewable or low-carbon sources of heat, electricity and gas and carbon capturing technologies price-competitive. The overall goal of this instrument is to make renewable or low-carbon sources of heat, electricity, and gas<sup>14</sup> and carbon capturing technologies price-competitive. Through subsidies and other support schemes governments ensure that new technologies can compete. This instrument aims to contribute to the 2030 goal of 55% GHG reduction by 2030, as is mentioned by the description of the SDE++ instrument.

The SDE+ and current SDE++ programmes have been designed with the rationale of how much sustainable energy or CO<sub>2</sub> emissions can be reduced for a given amount of money. This question has guided the design of a multi-annual, technology specific instrument with multi-tiered financing rates across the duration of a supported project. This is explained further below.

---

<sup>14</sup> Knowing the Dutch, "renewable gas" probably stands for H<sub>2</sub>, ammonia, methanol, biogas, etc.

### 7.2.2 Type of support being offered

The instrument can be used to support the development of the following technologies and a series of specific technologies within each of these: renewable electricity, renewable heat, renewable gas, low-carbon heat, and low-carbon production<sup>15</sup>.

The core of the instrument centres on subsidizing the unprofitable component of a new technology for generating renewable energy or reducing CO<sub>2</sub> emissions. The unprofitable component is the difference between the cost of the technology in question (the base rate) and the market value of the product which is created through the technology. The underlying reasoning here is that in time, the market value of the project will increase and as such, the subsidy provided by the RVO will gradually decrease. The base rate is set at the beginning of a project and remains the same throughout, while the additional amount (the corrective amount) is adapted annually. Subsidies are provided for 12 to 15 years<sup>16</sup>. A different base rate has been set for each of the aforementioned technological areas, calculated by the PBL, the Netherlands Environmental Assessment Agency.

An important aspect of the instrument is that applications can be submitted in sequential phases and each phase has a different subsidy rate per tonne of CO<sub>2</sub> reduced. In phase 1 an applicant can get 90€ per ton of CO<sub>2</sub> reduction achieved while in phase 5 (which takes place several weeks after Phase 1), applicants can get up to 400€ per tonne of CO<sub>2</sub> reduced.

## 7.3 Implementation & results

### 7.3.1 Organisations involved and their roles

The main organisations involved in this instrument are the RVO and the Ministry of Economic Affairs and Climate. The RVO is in charge of the day-to-day implementation of the instrument where the Ministry has final responsibility for the instrument. The RVO and Ministry have regular meetings where the RVO updates the Ministry and new trends, challenges, or other issues from the business sector which the RVO encounters through its contact with enterprises are shared as well.

The RVO implements its instruments, including the SDE++ programme with the help of a digital payment support organisation, Verticer. Verticer plays a role in monitoring payments made to project participants and provides the RVO with information on measurement indicators.

The RVO, Ministry and PBL also have a standing monthly meeting to discuss the progress of the supported projects, to reflect on the base rates which have been calculated per technology and other issues regarding the instrument and developments in renewable energy technology and CO<sub>2</sub> emission reduction.

The RVO has an internal policy team which is involved with the design of the SDE instrument when it first started, and which continues to advise the Ministry on the design and implementation of instruments for enterprises. This arrangement continues to be the case within the SDE++ instrument. The RVO, as an enterprise support agency, interacts closely with businesses and reports on the main trends and challenges they see arising amongst enterprises. They use these experiences to advise the Ministry regarding the design and implementation of support instruments. In this way the RVO and Ministry try to improve the instrument on a continuous, annual basis.

---

<sup>15</sup> <https://english.rvo.nl/sites/default/files/2023-08/English%20brochure%20SDE%2B%2B%202022%20-%20juli%202022.pdf>

<sup>16</sup> <https://english.rvo.nl/subsidies-financing/sde/features>

From an implementation perspective, there are approximately 65 FTEs at the RVO involved in delivering this instrument to enterprises. There are employees with financial expertise, with policy and regulatory expertise on what can and cannot be supported by the government, as well as employees with technical expertise in engineering, technology, and science. These individuals have either developed expertise over time or followed specific educational programmes or courses to add to their existing knowledge. Each of these expertise profiles are important in assessing applications and management of supported projects.

Participating in the instrument involves a relatively long-term commitment from enterprises and the RVO (12 years and up) and a substantial amount of time is required for following up with existing project participants as well as designing and assessing applications for new rounds of support. The RVO indicates that the organisation builds up a relationship with the enterprises due to the longevity of the projects which the instrument supports.

### 7.3.2 Budget for practice

The annual budgets have ranged between 6 M€ to 12 M€ for SDE+ and SDE++<sup>17</sup>. 8 M€ for 2023<sup>18</sup>.

### 7.3.3 Delivery of support to enterprises

**Application requirements:** To apply for the subsidy, enterprises prepare an application including which must adhere to the relevant technological criteria. The RVO uses an online submission system which explains which proofs or annexes are required at each step on the application process. Depending on the technology and type of project applicants can be requested to provide transmission capacity indication, a feasibility study, the necessary permits, or if necessary a site owner consent form<sup>19</sup>. Furthermore, applicants need to demonstrate how they aim to finance the project, showing own or private capital, how much financing will be leveraged from financiers such as banks (pending an approval for the project by the RVO and declaration that they will provide a subsidy).

**Assessment and follow-up:** The RVO commences the assessment of applications with a completeness check to ensure all required documents are present. There are specific technological criteria for each of the technologies which can be covered. Applications are also assessed based on the subsidy intensity of the application, namely the amount of financing requested per tonne of CO<sub>2</sub> reduction. The subsidy intensity depends on the application amount, the long-term price, and the emissions factor, which in turn can be calculated using online tools provided by the RVO.

Projects with a lower subsidy intensity (i.e. cheaper projects for the RVO to finance) are assessed first. Larger projects (approximately 100M€ and up) are assessed more thoroughly by amongst others, specialised financial experts at RVO.

For applications which are incomplete or unsuccessful, the RVO contacts the applicants to discuss application, to explain the instrument and/or explain the basis for the assessment of the application, providing 1-to-1 meetings with enterprises where possible. The RVO also organises webinars on different subsidy instruments.

---

<sup>17</sup> <https://www.rvo.nl/subsidies-financiering/sde/aanvragen/feiten-en-cijfers>

<sup>18</sup> <https://www.rijksoverheid.nl/actueel/nieuws/2023/02/17/dit-jaar-8-miljard-euro-beschikbaar-voor-duurzame-energie-en-verlagen-co2-uitstoot-met-sde>

<sup>19</sup> <https://english.rvo.nl/en/subsidies-financing/sde/apply#applications>

The payments start only when the project enters operation. Each month an advancement is paid; at the end of the year a correction is made.

Projects are assessed on a first come, first serve basis. There are these 5 phases per year that take place one after the other. Applicants choose in which phase to submit their application. Furthermore, there are particular limits per technology (e.g. PV panels would always be cheaper than CCS, etc. This corrects for that)

#### 7.3.4 Results and benefits

The Sde++ instrument was evaluated in 2021. The evaluation report indicated that the SDE+ has made a significant contribution to scaling up renewable energy production in the Netherlands, 33% of the renewable energy in the NL in 2020 was produced from projects that received SDE+ support. That being said, the instrument it has proven insufficient to achieve the renewable energy target for 2021. The evaluation also notes that SME+ ensured fast growth of renewable electricity, but renewable heat lagged behind. Consequently, the scope of SDE++ is larger<sup>20</sup>.

Currently, at the time of writing (February 2024), some 35000 projects have been supported since the start of the instrument. In 2024, 2000 projects have been supported; these projects being of a larger scope and requiring more subsidisation. The budget from the RVO remains the same for this past year.

The SDE++ instrument has gained international recognition as well. The RVO has presented the instrument to authorities from France, German, Canada and Australia for instance.

**National, contextual factors playing a role:** There are several national contextual factors which facilitate the design and implementation of the SDE++ instrument. At the political level the Netherlands' national Climate Accord demands action across sectors and industries to meet climate objectives. This has provided an extra impetus for the expansion of the SDE++ instrument to its current form.

Furthermore, the close relationship and alignment between the Ministry of Economic Affairs and Climate with the RVO, as well as the cooperation with the Netherland Environmental Agency is an important component in designing a flexible instrument which evolves in line with technological advancements and the changing needs of enterprises regarding the sustainability efforts. The regular, established meetings between public actors is part of Dutch, policymaking and institutional habit, deriving from its national cultural history.

## 7.4 Experiences and lessons learned

A number of success factors can be identified for this practice:

- Using and expanding on an existing instrument: the instrument appears to be relatively well known based on the rate at which the available budget is allocated to projects. By adding technologies which can be subsidised to an existing instrument enterprises do not need to find or acquaint themselves with a new instrument for a given technology.
- The regular tripartite meetings between the RVO, the Ministry and the environmental agency means that current issues and challenges experienced by enterprises can be discussed and, where necessary, the instrument can be adapted so that it remains relevant to the needs of industry.

---

<sup>20</sup> Ministerie van Economische Zaken en Klimaat, (2021), Evaluatie van de SDE+ Eindrapport: <https://open.overheid.nl/repository/rnl-bde7142a0c6b7f766699c8f61329d1325231a24e/1/pdf/eindrapport-evaluatie-van-de-sde.pdf>



- The long-term financing with a variable compensation rate means that enterprises have enough time to establish, implement and refine technologies while the RVO subsidy decreases as a technology becomes more profitable. This is financially efficient for the RVO and the results of the instrument.
- The longevity of support and relationships built with the enterprises also appears to be a success factor; this allows enterprises to establish a long-term strategic vision and to commit to developing and implementing environmentally friendly technologies. I
- The flexible, reflective attitude from the Ministry and RVO mean the instrument can be adjusted on an annual basis so that the instrument remains relevant to technological advancements and needs of enterprises.

The RVO provides a few key lessons learned along the way:

- Do not try to do everything at once: the RVO gradually added technological areas based on feedback from industry.
- Do not make an instrument too complicated to begin with, rather refine the instrument and adapt it over time.
- Support entrepreneurs where possible and make access to the instrument easier: the RVO provides a calculation model and tool which enterprises can use to calculate how much subsidy they expect to need. The RVO also offers direct contact and support to enterprises with questions about applications as well as during a project's life cycle.
- Try to distribute the resources as efficiently as possible. The RVO assesses projects with smaller subsidy requests first for instance so that these enterprises can start their activities.



## 8 TSE Industry Studies, the Netherlands

---

### 8.1 Basic information

<b>Details of practice</b>	
Name	TSE Industry Studies
Country (and region)	Netherlands
Date implemented (and ended)	2012
Agency involved	Netherlands Enterprise Agency, RVO
Responsible organisation	Ministry of Economic Affairs and Climate
Target group	Enterprises in the Netherlands

### 8.2 About the practice

#### 8.2.1 Rationale & objectives of the practice

This measure, the Top Sector Industry Studies (*Topsector Industrie Studies*, or TSE), programme was established in 2012. The rationale for the programme was that for many enterprises transitioning to sustainable energy, (including the reduction of CO<sub>2</sub> emissions), or different energy options represents a substantial challenge. Notably, integrating and embedding an energy-related innovation, into the full scope of an enterprise's operations. The TSE programme helps enterprises to conduct studies which help to implement new innovations and knowledge into practice. Enterprises often have a knowledge gap regarding different energy utilisation methods or sustainable energy. The RVO and Dutch Ministry for Economic Affairs and Climate noted that without support, enterprises were not taking enough steps in this areas and that there was a need for support to enterprises in bridging that knowledge gap and to apply new sustainable energy technologies.<sup>21</sup>

#### 8.2.2 Type of support being offered

The TSE programme offers enterprises financing to conduct three different types of studies. Enterprises can receive a subsidy of up to €2 000 000 and can be used to conduct studies which relate to the thematic lines of the programme: 1) closing industrial supply chains, 2) a CO<sub>2</sub> free heating system, 3) optimal electrification and radically new processes, 4) CCUS (Carbon Capture, Utilization and Storage), 5) other CO<sub>2</sub> reducing measures and 6) hydrogen and green chemistry.

The three types of studies which can be financed include:

1. A **feasibility study** for a pilot project in an innovative technology.
2. An **environmental study**: an environmental study is a preparation for environmental investments through a demonstration project or in a project with a fully developed technology. The study focuses on what investments an enterprise needs to make to achieve a higher level of environmental protection. If a demonstrator project is

---

<sup>21</sup> Interview with RVO, January 2024.

conducted as part of the study, it should be on a technology that is not fully developed yet.

3. A **comparable study**: investigate an environmental investment in a demonstration project or in a project with a fully developed technology that is not covered by an environmental study. This study can only be implemented for specific domains (in connection with competition and investment rules), namely:
  - Closing the material loop in production chains
  - CO<sub>2</sub>-free industrial heat
  - Maximum electrification of processes. Includes the following sub-programs: (i) production of H<sub>2</sub> and other “green molecules” and renewable fuels (e.g. ammonia, methanol), (ii) flexibilization and digitalization, (iii) process innovation, (iv) societal implications of industry electrification
  - Carbon capture, utilisation and storage (CCUS)
  - Other measures that reduce CO<sub>2</sub> in industry

### 8.3 Implementation & results

#### 8.3.1 Organisations involved and their roles

The Dutch innovation and enterprise agency, the RVO (*Rijksoverheidsdienst voor Ondernemerschap*) and the Dutch Ministry of Economic Affairs and Climate (EZK) took the initiative to develop this practice. The Ministry's directorate for Enterprise and Innovation generally identifies new areas of policies and support instruments and the RVO is usually an active partner in considering how to develop ideas for instruments into concrete programmes. The RVO currently implements and carries out the TSE instrument and the Ministry EZK is the responsible public authority.

#### *Budget for the practice*

The current TSE programme call runs from April 2023 until March 2024, with a budget of €200,000,000.

#### 8.3.2 Delivery of support to enterprises

The TSE programme is not rolled out through calls for proposals but rather on a first come first serve basis. The RVO website offers insight as to how much of the annual budget has already been allocated to successful proposals<sup>22</sup> so that enterprises can make an informed decision about preparing an application.

To submit an application enterprises first submit a succinct pitch for a project idea (on one A4 sheet). The RVO then helps to assess for which subsidies the submitted idea is eligible and best-suited. The enterprise can then prepare an application for a specific instrument such as the TSE programme. Applications are assessed by specific staff within the RVO with knowledge of the subsidy in question for completeness and broadly, whether they contribute to the six main thematic priorities within the TSE programme.

---

<sup>22</sup> RVO, (last updated January 2024), TSE Industrie studies, <https://www.rvo.nl/subsidies-financiering/tse-industrie-studies>

In the event an application is not successful, the RVO follows-up with a conversation or meeting with the enterprise to discuss why an application was denied and/or provide recommendations on how to adjust and improve their application. This step helps enterprises to understand the sometimes technical and/or policy jargon and provide better insight as to what enterprises need to do or consider when preparing an application.

Specific requirements for applying for the RVO's environmental programme, and the TSE programme in particular, are provided below:

- The projects may not last for more than a year
- Up to half of the project may consist of test work to answer feasibility questions, looking at the project costs and the eligible costs. The work cannot be aimed at developing a new product, as this would be industrial R&D.
- The studies should be done by a company or a venture, in which at least one of the parties is a stakeholder in the results

General criteria for energy innovation subsidies:

- The project must fit within the description of the program lines or program.
- For all demonstration projects, costs to third parties may not exceed 50% of the sum of investment costs and reference costs
- The project cannot start before the subsidy application is submitted
- Projects must start no later than 6 months after the decision.
- Your project must be technically and economically feasible.
- Specific requirements and explanations (from RVO/TSE website)
- Provinces, municipalities, and research organisations can be part of the project
- The technology should be sufficiently innovative
- the RVO should have sufficient confidence in the technical and economic feasibility
- Recipient should do enough to disseminate high-quality knowledge
- The project plan should have clear description of the follow-up steps in the event of a positive result
- The project should not concern a comparable study that is done independently.
- Partners should not be from the fields of fisheries and aquaculture, primary production of agricultural products
- Application should not concern activities about: the creation and operation of an export distribution network; other current expenditure directly related to export activities
- If project is about CCUS: (i) volume should be larger than 10 kton/year and permanent storage should exceed 100 kton. (ii) Storage of CO<sub>2</sub> should be permanent and cannot be on land. (iii) capture should not occur during electricity production and/or heat production from fossil fuels. Waste incineration is not considered a fossil source.

### 8.3.3 Results and benefits

Since the start of the TSE Industries the programme has support some 1,116 projects<sup>23</sup>.

## 8.4 Experiences and lessons learned

A number of challenges and success factors were identified for this practice:

- A key challenge for the TSE programme is getting enterprises to use the instrument. More recently attention of the programme appears to have grown (reflected in the fact that the budget for this funding period has been fully allocated<sup>24</sup>).
- The TSE instrument appears to relate to a specific need amongst enterprises, namely, to bridge the gap between knowledge and innovation, and practical implementation. Its continued existence and use points to a continued relevance.
- The relatively light first application: a one-page pitch with an idea for a project is submitted and followed by a discussion with the RVO on which subsidy is best suited for the submitted idea. This is then followed by the application to a specific instrument. This step allows the RVO to guide enterprises and navigate them through different subsidy requirements and criteria to an instrument best suited to the enterprise and the idea.
- The pragmatic and flexible follow-up by the RVO on running projects: enterprises submit plans of action with specified milestones in their applications. However, innovation projects can develop and evolve differently than initially planned. The RVO takes an accepting attitude towards projects which deviate from their original plans and monitors that the overarching project still contributes to one of the six thematic priority areas; as long as this is the case and key milestones are still met enterprises get a degree of flexibility in their innovation projects.
- The close support from RVO people to applicants: in navigating possible subsidies and the follow-up support to unsuccessful applicants.
- Expertise in house and internal communities of knowledge. Individuals who know about regulatory framework for providing enterprise support in green areas + people .

These challenge and success factors in turn yielded a number of lessons:

- Cultivating internal expertise is key
- One-on-one support to enterprises in 1) finding relevant, suitable subsidy instruments for an idea and 2) when developing and especially, adjusting applications for support. This helps to overcome one of the key challenges enterprises face – namely understanding the technical requirements and navigating the, at times complex, innovation subsidy landscape in the Netherlands.
- Sharing the internal expertise across the organisation is also key. The RVO's management structures appear to contribute to the spread of knowledge across the organisation; departments contain experts on specific subsidies and instruments and what can be done within them as well as experts on environmental regulations and frameworks. Furthermore, management teams contain representatives from different departments who report on developments, challenges, across departments. This means that insights or lessons learned in one department can (via the management teams) be recruited to support or share

<sup>23</sup> Topsector Energie Projecten, <https://projecten.topsectorenergie.nl/projecten>

<sup>24</sup> RVO, (last updated January 2024), TSE Industrie studies, <https://www.rvo.nl/subsidies-financiering/tse-industrie-studies>.

relevant insights with colleagues in other departments. This contributes to the flow of expertise and knowledge within the agency.

## 9 Grants for Environmental Technology, Norway

---

### 9.1 Basic information

<b>Details of practice</b>	
Name	Grant for Environmental Technology
Country (and region)	Norway
Date implemented (and ended)	2010
Agency involved	Innovation Norway
Responsible organisation	Innovation Norway, on behalf of the Ministry of Trade, Industry and Fisheries
Target group	The Environmental Technology Scheme is aimed at Norwegian enterprises of all sizes

### 9.2 About the practice/scheme

#### 9.2.1 Rationale & objectives for the practice

The expensive and uncertain process of testing a new technology on full scale.

The EU Taxonomy on sustainable activities is cited multiple times, together with the EU rules on state aid. The practice provides grants for development and demonstration of innovative products or processes that solve an environmental problem.

The objective of the practice is to reduce risk regarding development, pilot- and demonstration of new environmental technology

#### 9.2.2 Type of support being offered

The support consists of a grant which will cover a proportion of the total costs associated with the project, including personnel costs. The following types of activities can be funded:

- **Development activities:** Essentially R&D and market testing and marketing to pilot customers. All R&D costs are eligible for inclusion. (GBER art 25)
- **Full-scale demonstrations:** Additional costs refers to the additional costs associated with the chosen environmental solution compared with conventional solutions.
  - Environmental Investment aid for additional costs of investments where new solutions are being introduced and demonstrated that are better for the environment than what the EU currently requires. (GBER art 36 as presented in Green Deal revision of GBER)
  - Aid for introducing and demonstrating recycling or reusing waste or solutions that make use of waste streams in new ways. (GBER 47)

It should be noted however that aid cannot be provided for normal overhead costs and other operating costs. Only costs related to the project, additional to the enterprise's ordinary operations, can be included. Marketing and sales activities cannot be supported, irrespective of whether the market is national or international.

### 9.3 Implementation & results

#### 9.3.1 Organisations involved and their roles

Innovation Norway is responsible for the scheme, on behalf of the Ministry of Trade, Industry and Fisheries.

#### 9.3.2 Budget for practice

The programme's budget for this past year (for 2023) was approximately 400 million NOK, approximately €34 million. The budget has higher in the past (the measure started in 2010) but has been reducing over the years due to budget cuts. Budget for 2024 is approximately 250 million NOK.

#### 9.3.3 Delivery of support to enterprises

Enterprises can apply for the grant via Innovation Norway's online portal.

The enterprise must comply with international principles for corporate responsibility.

The proposed project must "solve an environmental problem", through "technologies, processes, solutions and services better for the environment than those currently in use". A quantified description of the project's environmental impact is required to be eligible for funding from the Scheme. An account of any potential negative impacts of the project must be provided as well.

Specific examples of environmental technologies are: renewable energy, energy efficiency, zero emission transport, energy storage, water and air purification, material efficiency and circularity, but also enabling technologies. Enabling technologies are defined as technologies supporting other areas of technology and contribute to the development of new industries and new products.

Projects that do not qualify for the EU Taxonomy will not be prioritized for the Environmental Technology Scheme. The scheme does not cover routine or regular changes to existing products, production lines, production methods, services, and work operations, even if such changes may constitute improvements.

A liquidity budget for the project period and an operating budget for 3 years beyond need to be provided.

If the applicant receives other public funding (subsidy) for the same project costs, the total public funding will be taken into account in the assessment.

To be eligible for the Scheme, the environmental impact of the project must be described and quantified. The solution must be compared to the best available technology/solution on the market.

Implementing the measure, evaluating projects for eligibility and assessing the impact of the project, requires a significant amount of insight and follow-up. The programme manager of the scheme is involved in a number of the cases where the taxonomy is being applied and an application is being assessed. This is due to the complexity of the EU taxonomy evaluation and the range of potential projects being assessed for the Scheme.

#### 9.3.4 Results and benefits

The reduction in CO2 emissions achieved through the measure are not yet calculated. For R&D projects, such reductions are quite unpredictable. The measure is praised by customers who make use of it. Successful projects are often used as use cases in the agency's external communication and promotion activities. Despite the budget cuts to the measure (see the section on the budget), it is considered effective and important by Innovation Norway.

**National, contextual factors playing a role:** In addition to this particular scheme, Enova is another funding institution in Norway providing funding for climate technology projects. There is a Norwegian political awareness for the need of government funding to accelerate climate action. Funding available for enterprises with net-zero related and climate action related projects is a part of this picture.

#### 9.4 Experiences and lessons learned

All financing from Innovation Norway must be within the boundaries provided by State Aid Regulations. However, the Environmental Technology Scheme is often combined with risk loans and guarantees.

Training and individual follow up of case handler is crucial.

Main lesson is that successful implementation of green measures requires a long term, steady strategic direction, to build expertise within the agency to assess climate and net-zero related projects.

## 10 Translating the EU taxonomy to agency systems; environmental technology grants, Innovation Norway

---

### 10.1 Basic information

<b>Details of practice</b>	
Name	Translating the EU taxonomy to agency systems; environmental technology grants
Country (and region)	Norway
Date implemented (and ended)	(2021?)
Agency involved	Innovation Norway
Responsible organisation	Innovation Norway
Target group	This practice is not targeted specifically at enterprises. Instead this practice is an internal practice for the agency, integrating the EU taxonomy on green investments into support programmes and their requirements.

### 10.2 About the practice

#### 10.2.1 Rationale & objectives for the practice

Innovation Norway has been working with green financing schemes for many years. However, the agency always asked itself how to define an application for an environmental project (by enterprises or other organisations), as green enough? The implementation of the EU Taxonomy and its integration with the existing internal methodologies was undertaken to facilitate the assessment of applications by enterprises for support for their green projects. The practice does not have a formal objective.

The rationale for incorporating the EU Taxonomy into existing green assessment methodologies was twofold. The EU anticipated that a lot of enterprises would need support in their green activities and Innovation Norway wanted to help prepare businesses when developing their applications for green projects and to help them in the reporting requirements regarding green activities.

The aim of the Innovation Norway taxonomy is to guide case handlers in establishing whether an activity in an enterprise's funding application qualifies as a sustainable activity within the EU Taxonomy. The broader aim of the Innovation Norway taxonomy is to help ensure that the agency funds sustainable practices with its instruments and subsidies.

#### 10.2.2 Type of support being offered

Innovation Norway categorizes all project funding based on ten environmental impact classifications aligned with the EU taxonomy for sustainable activities. This approach extends beyond assessing only climate impact. It enables Innovation Norway to monitor the distribution of funding across different categories.

The agency had developed its own internal methodology for assessing whether an environmental project was green enough. Projects applying for support from the agency has



to provide a substantial contribution to environmental targets. The agency had developed 11 different targets. Enterprises then had to document and quantify their contribution towards these targets in their applications. This early system was in line with OECD and UN principles for multinational enterprises and green activities.

Once the EU Taxonomy arrived Innovation Norway integrated it into the existing assessment methodology. The six main targets in the EU Taxonomy aligned well with the 11 original targets Innovation Norway had been using; the 11 targets in fact fit well within the 6 EU Taxonomy targets. To integrate and adopt the EU Taxonomy in everyday use, Innovation Norway read up on the available EU level documentation and tools, including the EU Taxonomy navigators a compass. However, they discovered that it was still difficult to find the correct, relevant area of business activity and to match this with the provisions and criteria in the EU Taxonomy. As a solution to this issue, the agency developed its own navigation tool for navigating the EU tools (a compass for the EU compass, if you will). This allows programme and project managers from the agency to search within the Norwegian navigator and select the relevant enterprise activity (NACE codes) and to then identify the types of EU Taxonomy criteria quickly in place for those specific business activities. Programme managers can search within a target area, select the enterprise activities, and get directed to the activity areas defined in the EU taxonomy along with relevant environmental definitions and criteria.

### 10.3 Implementation & results

#### 10.3.1 Organisations involved and their roles

The internal taxonomy was developed by Innovation Norway. The central office took the initiative to develop this taxonomy and then rolled out and trained staff across Norway's 20 regional offices in using the taxonomy.

#### 10.3.2 Budget for practice

(Not applicable)

#### 10.3.3 Implementation of the practice

The internal agency taxonomy was developed through several steps:

- The agency reviewed what it is they wanted to achieve exactly; in this case developing a tool to help case handlers navigate and apply the EU Taxonomy. As employees found the EU Taxonomy Navigator complex to use and to find the right activity to assess, the goal of the Innovation Norway Taxonomy compass was to help staff find the correct activity and assess the sustainability thereof.
- The goal became for staff to search for activities within a target area and to select the relevant types of activities involved in the project activities for which an enterprise is seeking a subsidy or funding from the agency. Case handlers can select the relevant target and activities and get direct to areas within the EU taxonomy, relevant definitions, and criteria to apply to assess the sustainability of a project activity.
- The agency developed its own categorisation of sustainability targets and criteria in an excel to navigate the EU Taxonomy Navigator. This categorisation was then digitised using PowerBI to create an interactive navigation tool.
- Innovation Norway had also been using a Red Flag Guide to flag any sustainability risks in dialogues with customers (enterprises). This Guide was also integrated into a digital tool, the sustainability risk assessment tool. Case handlers use this because relevant sustainability risks need to be assessed to qualify as a sustainability project within EU taxonomy.

- Developing the Innovation Norway tool took approximately 1,5 years. A significant portion of the work went into understanding how best to digitise their framework properly; once this was understood the process went much more quickly.
- Staff members were trained in using the EU Taxonomy. The training was quite substantial, with at least 200 people trained in EU taxonomy. Besides this, small competence sessions with external speakers were initially held to create awareness and then once the tool was developed, Innovation Norway provided two 1,5 hour workshops to teach staff how to use it. Using the EU Taxonomy across Innovation Norway's offices (of which there are about 20), was coordinated through each regional office's sustainability offices.

#### 10.3.4 Results and benefits

Results and benefits of this tool are of a soft and implicit nature. The tool has made the work of the case handlers easier and more efficient in that they can no more easily navigate the EU Taxonomy Navigator and apply the taxonomy more easily to projects and applications by clients (enterprises). Furthermore, over 200 people were trained in how to use the tool thereby contributing to broader competence development within Innovation Norway, as well as stronger familiarity with the EU Taxonomy. The effectiveness of the tool is also reflected in the fact that the IMF has also applied a similar approach in its own work.

### 10.4 Experiences and lessons learned

Some key lessons learned during the development include:

- Developing the Innovation Norway tool took approximately 1,5 years. A significant portion of the work went into understanding how best to digitise their framework properly; once this was understood the process went much more quickly.
- Training and developing competence development in the area of sustainability comes from experience and learning on the job. Even senior case handlers sometimes face difficulty in assessing whether a project qualifies as a sustainable activity.
- The most time-consuming thing, which is ever present, is and remains the need for competences. Not only developing competences, but also repeating competence training from time to time to make sure knowledge and skills remain up to date. A way to facilitate this is to do competence module trainings once in a while, having recordings and online courses available so that people can look things up when needed.
- Online course for customers (enterprises) are useful as well. These tend to be more general but provide some information on what the agency is looking for when they are being challenged on certain issues regarding their applications for support.

## 11 Austria Climate Neutral City, Austria

---

### 11.1 Basic Information

<b>Details of practice</b>	
Name	Climate neutral city
Country (and region)	Austria
Date implemented (and ended)	2023 - ongoing
Agency involved	Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (BMK), Climate and Energy Fund, Austrian Research Promotion Agency (FFG)
Responsible organisation	Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (BMK) and Austrian Research Promotion Agency (Forschungsförderungsgesellschaft, FFG)
Target group	Austrian cities and towns

### 11.2 About the practice

#### 11.2.1 Rationale & objectives for the practice

This measure, "Climate-neutral city," was established by Austria's Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (BMK) in 2023 to support and expedite Austrian cities in becoming climate neutral through research and innovation. In this process, cities work to create the first climate-neutral urban districts, develop a variety of practical measures, and exchange their knowledge. This measure sits under Austria's National Energy and Climate Plan (NEKP), which presents a comprehensive and integrated plan that shows the way to achieving Austria's energy and climate targets by 2030.

Strategic objectives of "Climate-neutral city":

- Establish implementation partnerships with pioneer cities and support participation in the European Cities Mission
- Develop tailor-made research, technology and innovation (RTI) offering and capacities
- Build strategic intelligence and operational competence, support national/European learning and transfer processes

To achieve this, the agency is using a **grant funding mechanism** delivered through two tenders.

- Tender 1 – Pioneer city – Partnership for climate-neutral large cities:
  - The pioneer cities build capacities, transform their administrative processes and structures, implement this realignment towards climate neutrality in an exemplary district.
  - Available to cities of more than 50,000 inhabitants<sup>25</sup>.

---

<sup>25</sup> A corresponding funding offer was also created for smaller cities (10,000 - 50,000 inhabitants) as part of the mission via the funding program "Lighthouses for Resilient Cities 2040" of the Climate and Energy Fund.

- Tender 2 – R&D service:
  - Provides R&D services on the topic of “overarching climate-neutral governance for cities.”
  - Natural and legal people from Austria and Germany are eligible to participate.

Preparatory work to prepare Austrian cities to achieve climate goals in the mobility and energy sectors was initiated and supported in various initiatives (e.g. FIT4UrbanMission). Ambitious, innovative cities are already part of cooperation networks such as the “Smart Cities” networking platform. With the Pioneer City Initiative, these activities are bundled and further developed in order to enable system innovations in Austrian pioneer cities in 2030 as a contribution to the implementation of climate neutrality in practice.

### 11.3 Implementation & results

#### 11.3.1 Organisations involved and their roles

The Austrian Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology (BMK) is responsible for regulation and infrastructure, as well as the promotion of scientific research and technological progress. It is divided into six key Directorate generals, namely Executive Committee and Internationale Affairs, Mobility, Innovation and Technology, Transport, Environment and Circular Economy, and Climate Action and Energy.

The Austrian Research Promotion Agency (Forschungsförderungsgesellschaft or FFG) is a major organization responsible for funding and promoting research and innovation in Austria. FFG's primary mission is to support research, technology development, and innovation in Austria. It works to enhance the country's competitiveness and economic growth by promoting scientific research and its practical application. It provides funding and financial support for research and innovation projects.

The Austrian Climate and Energy Fund (Klima- und Energiefonds) is a government entity dedicated to advancing climate protection and renewable energy initiatives in Austria. The fund's primary mission is to support projects and initiatives that promote renewable energy, energy efficiency, and measures to combat climate change in Austria. It is primarily financed through a variety of sources, including both public and private funding mechanisms. The fund typically receives financial support from various channels: government budget, fees and levies, EU funds and public-private partnerships.

#### 11.3.2 Budget for practice

Total budget for the program is €8 million from the BMK. Financial transfer amounts to a maximum of €2 million per city. The costs incurred will be compensated 100%. A maximum of €38,000 excluding any VAT is available for the R&D service.

#### 11.3.3 Delivery of support to enterprises

The cities enter an official partnership with the BMK<sup>26</sup>. Through public-public cooperation, the BMK and the pioneer city jointly define their needs, their goals and their solutions for achieving

<sup>26</sup><https://klimaneutralstadt.at/de/initiativen/pionierstaedte.php#:~:text=%C3%96sterreichische%20Pionierst%C3%A4dte%20sind%20engagierte%20Vorreiter,Entwicklung%20schneller%20klimaneutral%20zu%20werden>

climate neutrality in cities by 2030. This is intended to build up the necessary capacities and competencies for the common mission - for example, through newly recruited employees in the cities who work directly on corresponding climate neutrality measures. A joint strategy between the BMK and the pioneer city enables efforts to provide public services to be pooled and aligned synergistically.

Besides this, the BMK takes care of the following:

- Activating learning environments and supporting knowledge transfer
- Development and development of indicators for measuring impact
- Identification and development of solution components
- Activation and support for pioneer cities
- Greenhouse gas accounting and indicators

The **application** takes place on the website of the FFG. Applicants need to provide:

- Structure plan – shows how the goals of the cooperation in the pioneer city should be structurally implemented.
- Resource plan – describes the allocation of monetary and human resources throughout the project.
- Description of implementation at district level.

Pioneer cities must have the ambition to undertake increased and accelerated efforts to achieve climate neutrality by 2030 in the areas of energy transition and mobility transition – and, if possible, also in the circular economy.

The **assessment** is conducted by FFG. The evaluation has the following key criteria<sup>27</sup>:

- Quality – max 15 points, split evenly between the clarity of the 3 different plans.
- Ambition – max 30 points, minimum 15 needed. Split evenly between the governance of the ambition (are all important bodies in the city involved, are all stakeholders on board etc.), implementation (will the project create at least one climate neutral district, is the project replicable across the city/across Austria, etc.) and learning and transferability.
- Personnel and organisation – max 25 points, given for gender composition of the project, commitment from politicians and administration.
- Relevance for the climate-neutral city mission – max 30 points, minimum 15 needed. Split evenly between:
  - Contribution to climate neutrality – measured quantitative contribution presented, the city contributing to that goal of the project, existence of preparatory work (RTI projects, strategies, urban climate goals, etc.)
  - Relevance to the energy and mobility transition – synergies with existing and planned initiatives, sufficiently addressing both the energy and mobility transitions, initiating new research, technology and innovation projects.
  - Contribution and leverage – effect of the project on other cities changing, possibility for incorporation of other public and private funding streams.

---

<sup>27</sup> <https://fdoc.ffg.at/s/vdb/public/node/content/ng0ABc-tSdmSQzAKe3kvwg/1.0?a=true>

#### 11.3.4 Results and benefits

13 pioneering small towns (10,000 to 50,000 inhabitants) are currently developing climate neutrality roadmaps as part of the 2022 call for proposals "Lighthouses for Resilient Cities 2040" of the Climate and Energy Fund.

As of February 2023, six "pioneer large cities" have received a funding surcharge: Vienna, Graz, Innsbruck, Klagenfurt, Villach and St. Pölten<sup>28</sup> as part of the first tender.

Additionally, prior to the opening of the tenders, the BMK published the "Climate Neutral city: Strategies and examples for sustainable urban development."<sup>29</sup> This document is able to guide the bidding and other external cities in their implementation and development towards climate neutrality.

#### 11.4 Experiences and lessons learned

Pioneer small towns can take up the results of research and demonstration projects of the larger pioneer cities. The FFG notes that, "large and small pioneer cities should support each other, participate together in the accompanying processes of the "Mission Climate Neutral City" and exchange valuable experiences - as companions and pioneers for the common goal of climate neutrality."<sup>30</sup>

---

<sup>28</sup> <https://www.ffg.at/presse/mission-klimaneutrale-stadt-erste-pionierstaedte-stehen-fest>

<sup>29</sup> [https://nachhaltigwirtschaften.at/resources/nw\\_pdf/eia/eia\\_224\\_en.pdf](https://nachhaltigwirtschaften.at/resources/nw_pdf/eia/eia_224_en.pdf)

<sup>30</sup> <https://www.ffg.at/presse/mission-klimaneutrale-stadt-erste-pionierstaedte-stehen-fest>



**technopolis**  
group 

[www.technopolis-group.com](http://www.technopolis-group.com)