European Commission

Just Transition Platform – Project fiche:

NEXT ENERGY

Italy

This document is part of a series presenting information and lessons learned on policy approaches at national, regional or local level supporting a just transition to a climate-neutral economy. The Just Transition Platform (JTP) assists EU Member States and regions to unlock the support in this transition. Visit the JTP website: https://ec.europa.eu/regional_policy/funding/just-transition-fund/just-transition-platform_en

Member State:
Italy

Region:
n/a

Sector:
Innovative projects and start-ups in the field of energy transition

Total project budget (€):
n/a

Financing conditions (co-financing rate in %):
n/a

Sources of funding:

EU funding:
n/a

National funding:
n/a

Regional funding:
n/a

Duration:
10 months, September 2019–July 2020

Responsible managing authority / agency / company:
n/a

Summary

Next Energy is an initiative promoted by Terna, Fondazione Cariplo, and Cariplo Factory. The objectives of Next Energy are the enhancement of young talents and to support the growth of teams, start-ups and companies with innovative projects, in particular in the field of energy transition and sustainability. The Next Energy programme aims to strengthen the culture of innovation as an enabling factor for change, facilitating the emergence of new sustainable solutions that respond to specific needs. It promotes development of youth employment and entrepreneurship, by encouraging the collaboration between the company, university and research sectors. Started in 2016, the initiative established itself as a benchmark in the world of Italian innovation.

Type of activities:

The fourth edition of Next Energy was divided into three independent and nation-wide calls open to all participants, each with its own focus. The 'Call for Talents' was designed for young graduates (under 28 years old) in Engineering, Physics, Mathematics, Statistics or Economics, who would join work groups dedicated to the development and management of innovative projects. The selected participants had the opportunity to carry out a six-month internship at Terna, focused on the Italian electricity system, innovation, project management and safety. The 'Call for Ideas' targeted existing start-ups and/or team of innovators, who are in the process of developing projects with a Technology Readiness Level (TRL) of three to six. In this case, 10 teams of innovators received support through a three-month incubation programme. At the Final Event, the best project was awarded EUR 50 000 voucher to spend on services provided by Cariplo Factory, for the winner to move to market process. The 'Call for Growth' was intended for five advanced start-ups that have already established a client base, successfully tested at least one prototype and/or have a marketable product or service. They needed to operate primarily within the EU and be engaged in projects based on initiatives and/or technologies with a TRL from six to eight. These start-ups were therefore capable of providing innovative solutions which align with Terna's areas of operations, such as Internet of Things, energy tech, advanced materials and sustainability, digitalisation, data management and analytics.

The areas of interest for the three calls included: environmentally friendly technologies, and their integration into the Italian electricity system; environmental integration of infrastructure, new construction and operation materials; and systems designed to integrate and manage the demand for electric mobility into the grid, e.g. Vehicle to Grid.

Goals and approach:

The initiative's main objectives are to promote the development of talented young professionals and to support the development of innovative projects in the field of energy transition. This is achieved through research and adoption of new solutions and technologies that enhance not only the flexibility and adaptability of the electricity system, but also its safety, efficiency and sustainability.

Important outputs, results or achievements:

The project's overall success lies in providing young people with opportunities to learn new skills and allowing start-ups and SMEs to develop their innovative projects. In the fourth edition, the 'Call for Ideas' received 55 applications. NE.M.E.SYS New Mobility Electric System was the start-up that won the EUR 50 000 voucher. NE.M.E.SYS is a start-up that specialises in technologies to promote the utilisation of hydrogen. Specifically, the project focuses on enhancing the production and use of hydrogen to make it a more efficient and economically-viable alternative to fossil fuels. The applications of this technology span across various sectors, including residential (domestic usage), industrial, and large-scale transportation systems.

The 'Call for Growth' received 64 applications by advanced start-ups. Among the selected start-ups with the highest potential was Enerbrain, which developed software and hardware solutions for the sustainability and energy efficiency in buildings.

Scalability[1] and transferability[2]:

The simple framework of this project offers great flexibility and scalability, making it easily replicable. Other companies and organisations, as well as Member States at national and regional levels, could benefit from similar approaches. Similar initiatives could target local young graduates and young innovators under the age of 35. They could also invest in SMEs and start-ups, which would contribute to economic diversification and greening of the economic activities.

Key success factors and lessons learnt:

This project sets a great example in terms of engaging young people in the just transition process. The partnership with the grid operator responsible for managing the electricity flows in Italy is a unique feature of the model. This organic approach fosters a strong connection between the promotion of young talented professionals, the development of innovative ideas and the acceleration of start-ups on one hand, and the concrete implementation of innovative solutions and modernisation of the office environment on the other.

Key challenges:

To improve this project, it is suggested to provide a clearer follow-up on the winning projects. This could include regular updates on their progress, and highlighting any challenges or obstacles they may have faced along the way. Such updates can help clarify the impact of the funding and provide transparency to the wider audience. Additionally, it would be helpful to make more updated information available on the project's website and/or on social media. For instance, updates on upcoming calls, information on the application process, and success stories from past winners. By providing more accessible and up-to-date information, the project can attract more applicants and build a stronger reputation on a national and possibly international scale.

Tools for supporting economic diversification and reskilling/ upskilling via projects:

- providing workforce and start-up with training and upskilling programmes;
- building private capabilities for innovation.

Central framework conditions[3]:

The Italian socio-economic landscape presents several difficulties for young people trying to enter the job market, characterised by high structural unemployment, low productivity, and limited economic growth. This could be attributed to various factors, such as rigid labour market regulation, limited job creation and a growing mismatch between the skills demanded by the employers and those supplied by employees and jobseekers.

Additionally, companies and individuals also struggle to be innovative due to insufficient funding in research and development. The limited access to funding hinders the aspirations of young individuals, who do not have the necessary capital to start their own businesses or innovative start-ups.

Moreover, complex tax systems and regulations can discourage companies, start-ups and individuals from investing in innovative and sustainable projects, initiatives and programmes. Simplifying tax procedures, providing incentives for green innovation, and offering tax breaks to companies that hire young talent could contribute to a more favourable environment for youth employment and start-ups.

Outlook:

According to available information, the project publishes yearly calls on their website. The first four 'Calls for Talent' received over 500 CVs, selecting 45 interns, of whom 34 were given permanent contracts, with another 23 hires from the database of CVs generated by Next Energy over the years. More than 55 new hires under the age of 30 is of crucial importance in terms of skills and generational turnover for Terna, Italian national operator of the electricity grid, and it represents a concrete contribution to the energy transition in the country for an increasingly sustainable and decarbonised system.

[1] Scalability entails that a policy approach can be adapted to a bigger scale than just the local context.
[2] Transferability entails that a policy approach can be applicable to a similar setting and replicated.
[3] Framework conditions encompass the institutional, informational and socio-economic factors that determine a given environment (contextual information), e.g. market conditions, access to finance, tax regulation, infrastructure and support.

Partners & contacts:

- Terna Group – grid operator
- The Cariplo Foundation – philanthropic organisation
- Cariplo Factory – innovation hub

Website / Social media:

https://nextenergy.cariplofactory.it/en/

https://www.facebook.com/nextenergyprogram/?fref=ts

https://twitter.com/NextEnergyItaly

Sources:

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