PRESS
RELEASE

TEHA-ENEL STUDY ON THE STRATEGIC ROLE OF HYDROELECTRIC. IN ORDER TO ENSURE ENERGY SECURITY AND DEVELOPMENT IT IS KEY TO QUICKLY OVERCOME REGULATORY UNCERTAINTY: PROJECT FINANCING IS ALREADY AVAILABLE WITH THE "FOURTH WAY" AS AN ALTERNATIVE

- *Hydro accounts for around 15% of Italy's electricity consumption while playing a key role in an energy system which is not self-sufficient.*
- *In addition to the energy and socio-environmental benefits, hydro has significant industrial value: it activates a supply chain worth over 37 billion euros and 19 billion euros in exports.*
- *Timing is imperative: 86% of concessions in Italy have expired or are expiring, in the absence of a harmonized European regulatory framework and non-reciprocity between Member States. Rapid action to benefit the sector and the Country is necessary.*
- *Certain viable paths are available, the best of which being public-private partnerships.*
- *The "fourth way" is the alternative, i.e. the reallocation of concessions in return for an investment plan. This option would unlock investments of up to 16 billion euros at least six years ahead compared with current scenarios, with positive effects on GDP of 18.5 billion euros.*

Cernobbio, September 6th, 2025 - The **future of hydroelectric power, a historic and strategic resource** for the **Italian energy system**, is strongly linked to the legislative and regulatory framework of **concessions**: it is key to provide clear guidance as well as defining as soon as possible **certain and stable rules** as they enable **new investments**, **strengthening its role as the Country's first renewable source** as well as ensuring **energy security, environmental sustainability and industrial development**. These objectives are achievable provided that the current regulatory complexities are overcome to fully leverage on a fundamental asset for the national system. This is why it is key to work on the management of concessions, carefully examining all options. In addition to the three paths that can be taken to date according to the current legislation – open public tenders, mixed companies and public-private partnerships - a new solution could be evaluated, i.e. the **"fourth way"** based on reassigning concessions to the current concessionaires through renewal/restructuring of use conditions in return for an industrial plan alongside an overall harmonization and balancing of the current concession fee framework.

This is what emerges from the study "***Energy from water, strength and security of the Country: the strategic role of hydroelectric for Italy***", carried out by TEHA in collaboration with Enel, anticipated today, as part of the 51st edition of TEHA's Forum "*The Scenario of Today and Tomorrow for Competitive Strategies*", in a press conference attended by **Lorenzo Tavazzi**, Senior Partner and Board Member of The European House - Ambrosetti and TEHA Group, **Salvatore Bernabei**, Head of Enel Green Power and Thermal Generation at Enel and **Guido Bortoni**, President of CESI, former Head of the Energy Department of the Italian Government and former President of ARERA.

"*The study highlights how the hydro sector is a cornerstone of the Country's energy security and, for this reason, the right conditions must be created for its development*," commented **Salvatore Bernabei**, Head of Enel Green Power and Thermal Generation at Enel. "*This is a technology with predominantly fixed costs, which requires high technical skills and substantial capital both in the initial phase and for maintenance, and therefore has a long return on investment. In addition to these costs there are concession fees, which have increased up to sixfold in recent years. Hydroelectric production is also characterized by significant variability, with increasingly frequent periods of drought that have a major impact on production. The study highlights that the current regulatory uncertainty on concessions is delaying the investments needed for the entire system by up to six years.*"

"For Italy, hydroelectric power is a strategic technology, meeting around 15% of national electricity consumption. Its value is not only of an energy and socio-environmental nature, but also industrial: hydropower indeed activates a complex technological supply chain, worth over 37 billion euros in production and 19 billion euros in exports," commented **Lorenzo Tavazzi**, Senior Partner and Board Member of The European House - Ambrosetti and TEHA Group.

Hydroelectric **power** has been a **cornerstone of the Italian energy system for over a century**. At a time characterized by increasingly evident **climate change** and growing **geopolitical uncertainties**, this renewable source takes on an even more **strategic** value, contributing to the Country's **energy security**, **environmental sustainability** and **industrial development**.

Italy is now the **third country in Europe** in terms of **installed hydroelectric power**, with **22.9 GW** behind only Norway and France. With over **53 TWh produced in 2024**, hydropower met **15% of national electricity consumption** and **46% of generation from renewable sources**, confirming its position as the **Country's leading "green" source**.

Hydropower contributes to grid **stability** and **flexibility** and is also the least carbon-intensive source of electricity generation as well as being **less exposed to rare raw materials**, therefore more **resilient** to **external shocks**. The importance of hydropower also plays an **essential environmental** role in **the regulation of water resources**, mitigating both the **hydraulic risk** in the event of floods and the effects of **drought**.

The sector also activates a **complex industrial and technological supply chain**, worth over **37 billion euros in production** and **19 billion euros in exports**. In fact, the hydroelectric supply chain comprises around **150 technologies,** and for 70% of these Italy ranks among the **top three European producers**. It is therefore not only an **energy asset**, but also a **driving force for industrial competitiveness** and **qualified employment**, with technologies ranging from **hydraulic turbines** to **network equipment**.

Besides these strengths, the study highlights a **criticality** that risks compromising the future of the sector: **86% of concessions for large hydroelectric diversions** have already **expired** or **will expire by 2029**. Without timely intervention in the direction of greater stability and clarity of the legislative-regulatory framework, the Country risks a **delay in investments of at least six years**, with negative effects on **production capacity** and **energy security**, but also on **industrial competitiveness** and **employment**.

This is part of a European context lacking reciprocity, in which Italy is the only European country to have **provided such a broad opening** to its market, while other States have maintained more **protective approaches** and concessions of **longer duration** than those in Italy (40 years), up to **75 years in France** and **without limits in Norway and Sweden**. The **European Commission**, which had launched an **infringement procedure** against Italy in 2019, subsequently closed the proceedings, considering that continuing the infringement procedure was not a priority.

The urgency of action, given the expiry of the concessions, has made it necessary to analyze the individual reassignment options, which can take place, in line with current legislation, through **three modalities** – **competitive public tender procedures**, **mixed public-private companies** and **public-private partnerships** – to which is added a possible "**fourth way**", based on **renewal/restructuring of use**

conditions in return for an industrial plan as well as an overall harmonization and balancing of the current concession fee framework.

The study envisions that this "**fourth way"** could better balance **efficiency**, **competitiveness**, **stability** and **sustainability**. This is the reassignment of concessions in return for a secure and agreed investment plan.

Against this backdrop, investments of up to **16 billion euros** more than in the current scenario could be enabled. Guaranteeing the continuity of operators' investments would lead to tangible benefits: an increase in **hydroelectric production** by **5-10%**; a **reduction in CO_2 emissions** of up to **4.5 million tons**; an increase of **2 percentage points of renewables** in the **national electricity mix**; **savings of up to 1.1 billion euros** for the community; the generation of **18.5 billion euros of additional GDP; the creation of up to 20,800 additional jobs**, also maintaining the current employment in the sector.

Among the existing options according to current legislation, the **Public Private Partnership (Project Finance)** has interesting aspects in terms of process timing and quality of the proposal. In line with this procedure, the selection procedure on which the competitive process is implemented starts from **an industrial project developed by a private proponent** that would relieve the public administration of the complex work of studying and preparing the necessary technical documentation, facilitating proposal selection, with the potential to speed up the processes.

The implementation of the "fourth way" or, alternatively, the PPP model, along with an overall harmonization and balancing of the current concession fee framework, represent a concrete opportunity to relaunch hydroelectric power, enhancing the role of the Regions and Autonomous Provinces while promoting strategic investments for the energy transition and the security of the national system.

For further information:

Press Office – TEHA Group

Fabiola Gnocchi +39 3497510840
email: fabiola.gnocchi@ambrosetti.eu
Silvia Lovati +39 3383430415
E-mail: silvia.lovati@ambrosetti.eu

Press Office – Enel

+390683057975
ufficiostampa@enel.com
gnm@enel.com
enel.com