

HYDROPOWER: TREND WORDS 2024

Key trends, understood as topical content for industry players, regarding hydropower in Italy show a significant increase in the production and adoption of renewable energy, with a focus on regulation and permitting processes.

- 1. **Increase in Hydropower Production**: Hydropower production in Italy has seen significant growth compared to previous years. In the first eleven months of 2023, hydropower production reached 35,485 GWh, marking a 38.3% increase over 2022. As of April 2024, renewable sources covered more than 50 percent of electricity demand, with a 197.5 percent increase in hydropower generation compared to April 2023 (Quotidiano Nazionale).
- 2. Regulations and Authorization Procedures: Regulations for the construction and operation of hydropower plants are governed by Legislative Decree No. 387/2003, which introduces the simplified Single Authorization procedure for plants with a capacity above 100 kW. Below this threshold, it is possible to opt for the Simplified Permit Procedure (PAS). However, the authorization procedures are not yet fully coordinated with the rules for the granting of the Concession, causing delays due to a "double process" (RiEnergia). The permitting process also includes environmental proceedings.
- 3. **Incentive Policies**: Energy Decree 181/2023 and FER X introduce new incentives to promote renewable energy production, including hydropower. These decrees aim to improve national energy security and provide incentives for regions to host FER plants (<u>RiEnergia</u>).
- 4. Challenges and Future Goals: Despite the increase in renewable capacity, Italy needs to accelerate the pace of new plant installation to meet the 2030 targets set in the National Integrated Energy and Climate Plan (NIPEC). More annual installed capacity is needed to reach the 143 GW needed according to the projections of <u>Elettricità Futura</u>.

In summary, the hydropower sector in Italy is undergoing a phase of transformation, conditioned by new regulations and incentives, but still faces significant challenges in terms of regulatory coordination, renewal of concessions, new storage facilities, and accelerated revamping and repowering of existing plants.

All this will be discussed at **AQUAWATT**, the conference exhibition scheduled to take place at **Piacenza Expo** from October 29-30, 2024. A forum where companies, institutions, associations and the world of research will converge to create networking synergies and develop project comparisons useful to the renewable energy sector.

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