



GAS SUPPLY IN TICINO

Energy Security, Transition and New Regulatory
Perspectives

The Legal Question

- Framework: Cantonal Energy Plan (2013), updated in 2024 by the PECC, under consideration
- Alongside it: revision of the Cantonal Energy Act and the Cantonal Master Plan
- Not only a technical or environmental question, but a legal one
- How can the legislator guarantee security of supply during a transition that is changing sources, infrastructure and energy carriers?

1. The Situation in Ticino

- In 2022, gas supply relied exclusively on the pipeline from Italy, connected to the AIL network
- Security depends on available quantities, physical security of the infrastructure and stability of the main supply route

2. Structural Tension — and the PECC Answer

- Under TI-2050 the PECC envisages a significant reduction of fossil natural gas
- Why invest in infrastructure for a carrier policy intends to abandon?
- The answer: reduce fossil gas, avoid network extensions without a long-term perspective
- Develop biogas and Power-to-X, electrify where efficient, strengthen production and storage
- Maintain diversified energy supplies in the meantime

3. Measure D.2.1: Conditionality

- Not yet a law: the PECC proposes considering the possibility
- Network extension only together with increased use of biogas or renewable synthetic gases
- Energy conditionality for infrastructure investment
- Not “how many users can we connect?” but “what role can this network play in a decarbonised system?”

4. Transforming the Network's Function

- A network built for fossil methane could carry different energy carriers
- The PECC considers renewable gases and Power-to-X: hydrogen and synthetic methane
- The question: not keep or eliminate, but progressively transform its function
- Legal consequences: planning, investment, network regulation, operators' obligations, transition costs

5. The Risk of Stranded Assets

- A premature phase-out could render existing infrastructure economically unusable
- The challenge is one of temporal proportionality
- How much should we invest today in infrastructure that may have to be transformed tomorrow?

6. Electrification and Energy Security

- If gas is replaced by electricity, enough electricity must be available when needed
- Summer surplus and winter deficit: still about 300 GWh in 2050
- Not a technological substitution, but a new architecture of energy security
- Based on storage, Power-to-X and diversified supplies

Governing the Transition

- Energy security does not mean energy self-sufficiency: a secure system is a diversified one
- No single source, infrastructure or route should be a systemic vulnerability
- Energy law must regulate the transition between energy systems, not only production and consumption
- The legislator's task is to govern the transition, so today's investments do not become tomorrow's obstacles



THE QUESTION THAT REMAINS

What do we want the gas network to become
when fossil gas is no longer its main energy carrier?

Security of supply and energy transition are not alternative objectives.

Thank you for your attention.