

SE Europe Energy Outlook 2025/26

The Interlinked Triad: Energy Efficiency, HE Cogeneration & Energy Poverty

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Athens, 5th of February 2026

Pillar 1: Energy Efficiency

The Unseen Infrastructure

Energy Efficiency First: the main moto of EU. It remains the **first fuel**, the most cost-effective source of energy security.

- IENE Outlook 25 shows that despite progress, a massive efficiency gap persists, especially in the building stock and industry. This isn't just about insulation or efficient appliances. It's about treating saved energy as a strategic national resource.
- The key insight here is that **every unit of Energy not needed is a unit do not have to be imported, generated, or subsidized**. It directly boosts economic competitiveness and reduces systemic strain. But its greatest power is unlocked when combined with the second pillar.



Pillar 2: High Efficiency Combined H & P

The Efficiency Multiplier

While efficiency reduces demand, **High Efficiency Combined Heat and Power (HECHP)** optimizes supply.

- Traditional power generation wastes vast amounts of heat. CHP captures this heat for residential or industrial use, achieving total efficiencies of 80-90%, compared to >50% for separate production.

For Southeast Europe, this is a double opportunity:

- **Modernizing District Heating:** Re-vitalizing urban heating networks with NG or, increasingly, biomass and geothermal CHP.
- **Industrial Competitiveness:** Providing affordable, reliable steam and power for energy-intensive industries.
- **HECHP** translates directly into lower operating costs and, therefore, the potential for lower energy prices.

This is the critical bridge to the third, and most human, pillar.



Pillar 3: Energy Poverty

The Social Imperative

The ultimate goal is not just efficient energy systems, but affordable comfort for all.

Energy Poverty remains a profound challenge in SEE region. It's where high energy costs, low incomes, and inefficient energy networks and homes collide.

- IENE Outlook's data indicates that households spending over 10-15% of their income on energy are not just statistics—they are forced to choose between heating and other essentials. This is a social and political risk that can undermine the entire Energy Transition.

We cannot talk about an *Energy Outlook* without looking out for the Citizens of SEE countries.



The Virtuous Cycle: Connecting the Triad

How do these three chapters form one story? This is the **virtuous cycle**.

- **Step 1: Deeply renovation of buildings** (Energy Efficiency). This reduces the total heat and power they need.
- **Step 2:** Supply those reduced demand with **high-efficiency cogeneration**, minimizing waste and system costs.
- **Step 3:** The result? **Lower bills and more stable prices**. This directly alleviates Energy Poverty and increases public acceptance of Energy Policies.

Furthermore, lower household demand frees up energy resources for the growing needs of industry and electrification, boosting the entire economy.

One policy that targets this triad, like building renovation linked to efficient district heating/cooling (see EED 2023/1791), has a multiplied positive effect.



Policy Recommendations & Conclusion

Conclusions and recommendations are inherently integrated, in SEE:

- **Policy Synergy:** Regulations and subsidies must link building renovation (Efficiency) with the modernization of local heat supply (Cogeneration). Treat them as one project.
- **Targeted Financing:** Use energy poverty mapping to prioritize public investments in the areas where Efficiency and CHP upgrades will have the greatest social impact.
- **Market Signals:** Support mechanisms for cogeneration must value its contribution to security, efficiency, and affordability—not just megawatts produced.
- **In conclusion,** Southeast Europe's energy pathway cannot be charted by looking at supply, demand, and social issues in isolation.
- By strategically linking **Energy Efficiency, HECHP, and the fight against Energy Poverty**, a resilient system can be built that is **less wasteful, more competitive, and more equitable**.

Thank you for your attention!

Any Q?

Don't forget: ENERGY EFFICIENCY FIRST!