



**BUILDINGS
PERFORMANCE
INSTITUTE
EUROPE**



SAFEGUARDING ENERGY SECURITY IN SOUTH-EAST EUROPE WITH INVESTMENT IN DEMAND-SIDE INFRASTRUCTURE

Executive briefing

An analysis of the building stock’s vulnerability to gas-supply disruptions concludes that Central and South East European (SEE) countries are confronted with a strategic choice. Slovakia and Hungary face a severe risk, Bulgaria a substantial one, to be unable to heat their national building stocks.

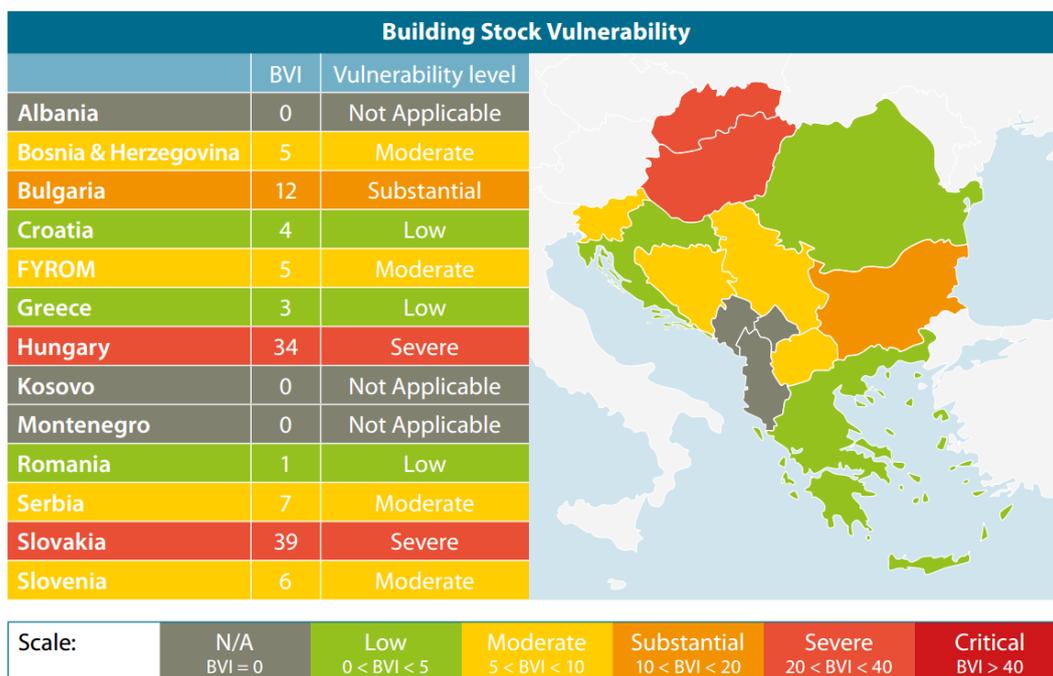
A newly developed *Building Stock Vulnerability Indicator (BVI)* assesses the vulnerability of the building sector to gas-supply interruptions. The BVI takes into account the importance of gas use in the building sector, along with the dependence on imported gas and its routes. Based on this assessment, seven countries in the SEE region are facing significant risk.

Considering this vulnerability, SEE States need to mitigate the pressure by considering viable alternatives.

An “efficiency first” approach is a viable alternative to counter the heavy focus put on gas infrastructure. A dedicated renovation programme could, within 20 years, address all gas-using buildings in the region and reduce the building stock gas consumption by as much as 8.2 bcm/a, or 70% of the current consumption.

This solution can prove to be very effective as the building stock in SEE countries consumes 38% of the gas imports.

Unlike supply-side solutions, which make the region more dependent on imported gas in the long term, demand-side solutions also bring a raft of other benefits – creating employment, boosting economic growth, cutting fuel poverty and improving the region’s often very poor air quality.



FINANCIAL VIABILITY

The savings far outweigh the initial commitment. A renovation programme targeting gas-using buildings would require an investment of up to €81bn (present value) over 20 years from all countries in the region collectively. This investment would lead to financial returns in the form of

reduced energy bills amounting to €106bn (present value), more than offsetting the investment. This benefit does not yet include the economic advantages of reducing financial flows to third-party countries and the benefit of stimulating the national economy.

RECOMMENDATIONS ON THREE LEVELS

In order to decrease the risks South-East Europe is facing, the following action should be taken:

PREVENTIVE MEASURES HAVE TO BE CONSIDERED

- The European institutions and countries in the region are strongly encouraged to set energy efficiency as an infrastructure priority.
- In drawing up their Preventive Action Plans under the Security of Gas Supply Regulation, participating countries need to look into demand-side measures on an equal footing with supply-side measures.
- Countries in the region are encouraged to take the Building Vulnerability Indicator (BVI) into account when preparing their risk assessments under the *Security of Gas Supply Regulation*.

EU LEVEL POLICIES AND DEFINITIONS NEED REFINEMENT

- Funds from the Connecting Europe Facility, the Multiannual Financial Framework, the European Fund for Strategic Investments and the Structural and Investment Funds should be better directed for investments in deep renovations of the building stock.
- Energy efficiency and demand-side response need to be taken into account in The Projects of Common Interest list for 2018.
- To ensure that local employment opportunities are maximised and that economic benefits are retained within the region, a strategic multi-country approach that sees the development of manufacturing capacity alongside the expected increase in the installation of renovation measures is required.
- The significant renewable energy potential in the region needs to be maximised, including within the building stock.

HEATING AND COOLING INFRASTRUCTURE TO BE PLANNED STRATEGICALLY

- A strategic roadmap should be developed to shift away from traditional heating and cooling methods based on fossil fuels and local biomass, towards modern approaches based on best available low-carbon technologies. Energy efficiency of the whole energy system, including district heating, should be addressed in order to mitigate the demand for gas as well as for other energy carriers.
- Subsidies for fossil fuels need to be phased out and redirected to clean energy developments that support the combination of renewable energy technologies and energy efficiency improvements in the building sector.

For an in-depth analysis, see BPIE's report at:

<http://bpie.eu/publication/safeguarding-energy-security-in-south-east-europe-with-investment-in-demand-side-infrastructure/>

