

The Future of Gas Infrastructures in Eurasia

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The IIASA-WEC study Global Energy Perspectives emphasized a pervasive trend in consumer demand toward cleaner, more flexible, and more convenient final energy forms, chiefly delivered by energy grids, and drew attention to potentially important energy infrastructure deficiencies in Eurasia. This paper compares planned interregional gas transmission lines and LNG terminals in Eurasia with the gas trade flows projected for 2020 in the IIASA-WEC study, focussing on the study's three high-growth Case A scenarios and its middle course Case B scenario. The comparison indicates, among other things, that high gas consumption in a scenario does not necessarily imply high levels of gas trade. Planned and proposed additions to gas export capacities in the former Soviet Union match quite well the scenario projections for 2020. Plans and proposals in the Middle East are consistent with a scenario with high gas trade, but appear excessive for other scenarios. Import prospects for the centrally planned economies of Asia are similar. Except for one scenario with high gas trade, currently planned and proposed increases in import capacity appear on the high side. For the Pacific OECD countries, the conclusion is somewhat paradoxical - more short-term import capacity appears to be needed in scenarios with relatively low gas consumption than in scenarios with relatively high consumption. High consumption would likely prompt more aggressive development of Australian gas resources. For both Western and Eastern Europe, a strategy of moderate expansions to current plans, adjusted to trends in gas consumption, appears robust across the scenarios.

Key words: gas, infrastructure, Eurasia