SLOVENIA

KEY FACTS:

- Gas demand dropped by 14% between 2010 and 2017
- Industry demand, represents over 50% of Slovenia's gas demand and dropped 26% between 2010-16.
- 99% of Slovenian gas is imported, mainly from Austria (62%) and Russia (34%) with a recent decrease in the diversification of imports.
- Several planned projects will expand and connect Slovenian gas grid (in the PCI Krk LNG Terminal cluster)
- Significant energy efficiency potential and on track to meet 2020 renewables target

1. GAS DEMAND

According to EU data:[1]

- Gas represents around 11% of Slovenia's energy mix[2]
- Slovenia consumed around 0.8bcm of gas in 2016.
- Gas demand dropped by 14% between 2010 and 2017.[3]

The Commercial gas sector has seen a very important increase of 176% from 2010 to 2016, which confirms the fact that Slovenia wants to attract gas infrastructures that are not intended for its domestic use.

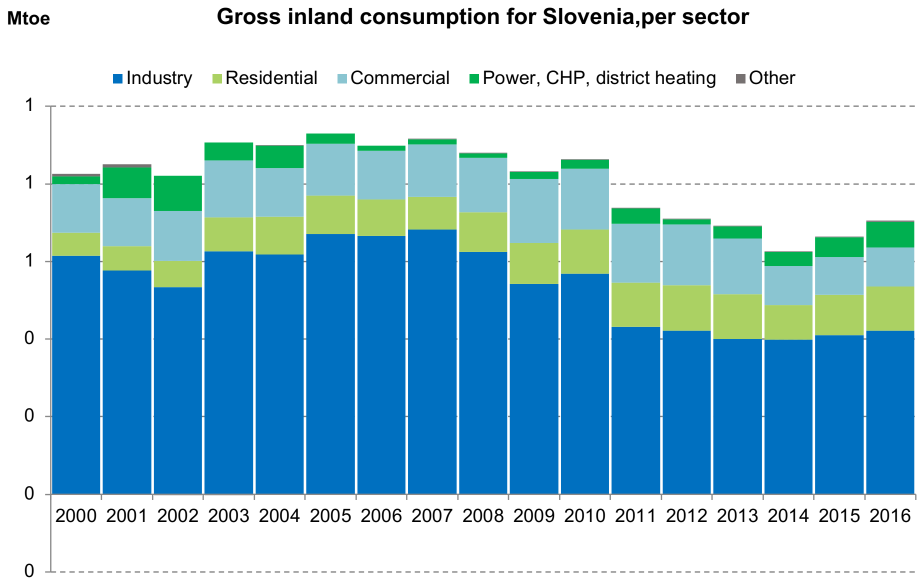
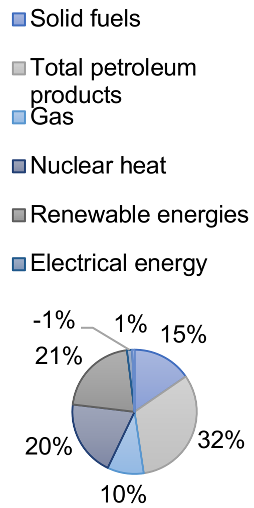


Figure 1: Slovenia 2016 Energy Mix

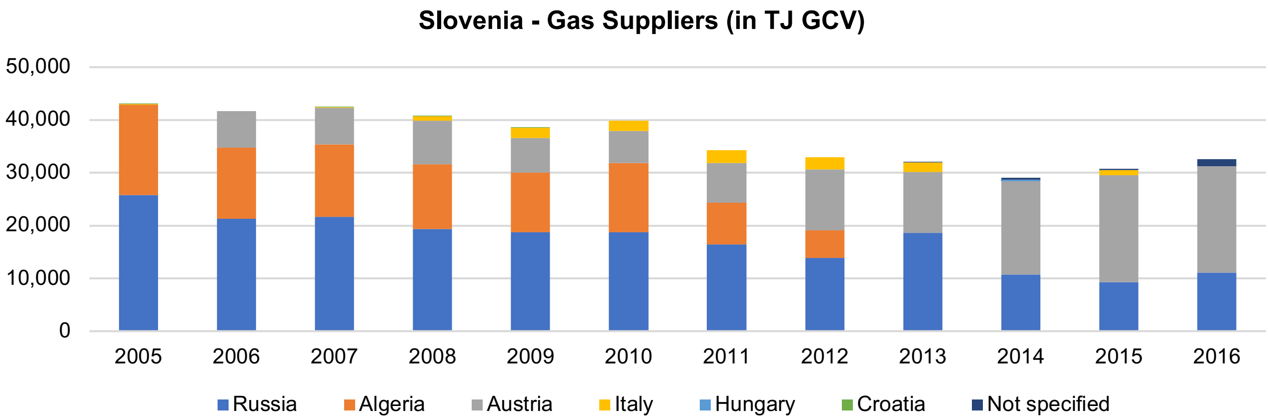


2. GAS SUPPLY

Slovenia produces an insignificant amount of gas (0.6 % of total consumption).

The situation may change after permits were granted to explore a tight gas formation in East Slovenia.[4] Gas obtained there started to flow on November 2017.[5] However, and despite a rise in gas production from 2015 onwards, the country is currently **almost entirely dependent on gas imports**: recently the share of Austrian gas in the total of imports has been increasing while Algeria seems to be no longer a gas provider for Slovenia - see graph.[6] In 2017, most of the imported gas was provided via Austria (75%) followed by Russia (23%).[7]

[1] E3G compilation of data extracted from Eurostat
[2] https://www.export.gov/article?id=Slovenia-Electrical-Power-Systems
[3] http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_gas&lang=en
[4] http://www.sloveniatimes.com/petisovci-gas-refinery-gets-the-environmental-go-ahead
[5] https://www.ina.hr/ina-starts-off-taking-raw-natural-gas-from-slovenia/13260
[6] http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports
[7] https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html



3. GAS INFRASTRUCTURE

The Slovenian gas transmission network consists of 1,121km of pipelines, with four main pipelines – see map.[8] Main activities of the gas transmission system operator (TSO) are performed by Geoplin's subsidiary, Plinovodi.[9]

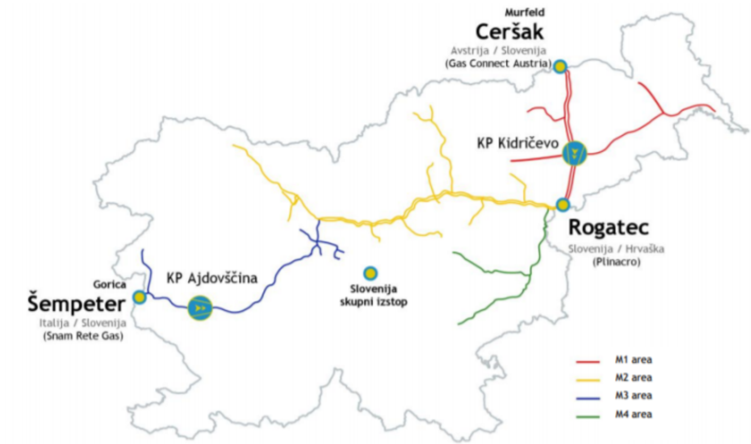


Figure 4. Schematic map of the gas transmission system with relevant points

Slovenia's most important gas interconnectors for import are from Austria (3.91bcm/y) and Italy (0.97bcm/y)[10] but the country is also connected to Croatia where it can send 1.8bcm/y.[11]

Network investments in Slovenia in 2012 alone amounted to €38 million, of which €9 million was granted by the EU[12] within the European Energy Programme for Recovery for the construction of the Ceršak – Kidricevo section of one of the existing gas pipeline.[13] Two upgrades of the transmission network were completed in 2013. End of 2014, transmission grid between Austria (at Ceršak) to Vodice (central Slovenia) was improved. From January 2015, additional transmission capacities on the interconnection points with Austria (Ceršak), Croatia (Rogatec) and on the interconnection point with Italy (Šempeter) were ensured, so to provide a serious improvement of security in terms of gas supplies. While Slovenia now has a gas transmission system **largely able to meet its limited demand for gas (only 5th source in Slovenia's energy mix)**, the country is still actively **involved in several projects of common interest (PCI):**[14]

The Krk LNG terminal cluster

Slovenia is associated with a series of PCI projects at the heart of which we find a new floating LNG terminal on the Croatian coast near the island of Krk (initially 2bcm, up to 6bcm/y send-out capacity).[15] The project involves the construction of a series of interconnections to link the terminal to neighboring countries, including Slovenia (see map) and Hungary as well as Italy.[16] With the aim of enabling LNG flows to the region, the PCI cluster Croatia – Slovenia – Austria is planned, consisting of a set of pipelines and compressor stations.[17]

[8] http://www.plinovodi.si/wp-content/uploads/2011/09/plinovodi-development-plan-2017-2026_ENG.pdf
[9] http://www.plinovodi.si/en/transmission-system/
[10] http://bpie.eu/wp-content/uploads/2016/09/Safeguarding-energy-security-in-South-East-Europe-with-investment-in-demand-side-infrastructure.pdf
[11] http://www.entsog.eu/maps/transmission-capacity-map/2016 & http://www.plinacro.hr/UserDocsImages/PCI/Interconnection%20Lucko-Zabok-Rogatec.pdf
[12] https://ec.europa.eu/energy/sites/ener/files/documents/2014_countryreports_slovenia.pdf
[13] https://www.ibe.si/en/news/Pages/Novica37.aspx
[14] http://www.plinovodi.si/en/transmission-system/projects-of-common-interest-pci/
[15] http://ec.europa.eu/energy/maps/pci_fiches/pci_6_5_6_en_2017.pdf and https://ec.europa.eu/energy/sites/ener/files/documents/pci_6_5_1_en_2017.pdf
[16] More about this costly unneeded mega project can be found in the report "Pipedream" https://www.foeeurope.org/krk-pipedream
[17] http://www.plinovodi.si/media/4766/pci-information-leaflet-626.pdf

However, even though many countries around Croatia are interested in the construction of an LNG terminal and transmission pipelines, none of them seem to be ready to contribute financially. These economic limits, changes of plans (build a floating terminal instead of an onshore plant, with significantly smaller capacity – around 2 bcm/y[18]) and lack of suitable infrastructure in Croatia have delayed the project and generated a lot of back and forth between the different stakeholders.[19] This is partly what pushed the Croatian economy minister to announce in July 2016 that he would consider removing the terminal from its list of strategic investment projects.[20] However, the project still lives,[21] though reduced to an initial capacity of 2bcm/y, and even received more than €100 million of financial support from the EU CEF programme in February 2017.[22] The EIB also announced in 2016 that it was ready to provide a €339m loan for the project.[23]

Yet, it finds little justification: It only attracts a limited enthusiasm from some governments in the region (starting with Croatia). No one seems to be willing to financially contribute (expectations are that the EU would finance more than half of the project…)[24] and several stakeholders doubt about the commercial viability of the project. Finally, this project would mostly aim at bringing fracked gas from the US with all the environmental and climate implications it holds.[25]

Connected to the Krk LNG terminal cluster is also the **Slovenia Hungary interconnection** project (a PCI), envisaging in a final stage a bidirectional capacity of up to 2.4bcm/y.[26] This project already received about 375.000€ of CEF funding.

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[18] http://www.lngworldnews.com/ukraine-interested-in-taking-part-in-croatian-lng-project/
[19] https://www.total-croatia-news.com/item/14243-when-will-lng-terminal-project-in-croatia-finally-be-launched
[20] http://www.financialobserver.eu/cse-and-cis/croatia/croatia-could-ditch-lng-terminal-on-island-of-krk-from-list-of-strategic-projects-2/
[21] http://www.total-croatia-news.com/business/15341-construction-of-croatia-s-lng-terminal-to-start-in-2017
[22] http://europa.eu/rapid/press-release_IP-17-280_en.htm
[23] http://www.eib.org/projects/pipelines/pipeline/20140627
[24] http://www.total-croatia-news.com/item/14243-when-will-lng-terminal-project-in-croatia-finally-be-launched
[25] http://www.total-croatia-news.com/business/15341-construction-of-croatia-s-lng-terminal-to-start-in-2017
[26] http://ec.europa.eu/energy/maps/pci_fiches/pci_6_23_en_2017.pdf