



**Demand assessment report
for incremental capacity referred to gas trans-
mission between *Plinovodi d.o.o.* and *Plinacro
Ltd.***

– External document for publication –

2023 – 10 – 23

This report is a joint assessment of the potential for incremental capacity projects conducted by

Plinovodi d.o.o.

Plinacro Ltd.

Cesta Ljubljanske brigade 11b

Savska cesta 88a

1001 Ljubljana

10000 Zagreb

Slovenia

Croatia

+386 1 5820 700

+ 385 1 6301 777

Info@plinovodi.si

market.plinacro@plinacro.hr



Table of contents

A. Non-binding Demand indications	4
B. Demand assessment	7
i. Historical usage pattern	7
ii. Results of current annual yearly auction	11
iii. Relations to GRIPS, TYNDP, NDPs	12
iv. Expected amount, direction and duration of demand for incremental capacity	12
C. Conclusion for the (non)-initiation of an incremental capacity project/process	13
D. Provisional timeline	14
E. Interim arrangements for the auction of existing capacity on the concerned IP(s)	15
F. Fees	16
G. Contact information	17

A. Non-binding Demand indications

Slovenian and Croatian entry-exit systems are connected at IP Rogatec.
Capacity is offered and used in both directions.

Technical capacity SI>HR:

Technical capacity on the Slovenian side is 68.922 MWh/d

Technical capacity on the Croatian side is 53.700 MWh/d

Technical capacity HR>SI:

Technical capacity on the Croatian side is 7.731 MWh/d

Technical capacity on the Slovenian side is 7.697 MWh/d

In line with Art. 26 of Regulation (EU) 2017/459, the transmission systems operators conducting this market demand assessment gave network users the opportunity to submit non-binding demand indications referred to gas transmission to quantify potential demand for incremental capacity. The period for submission on Croatian side was from 4 July to 29 August 2023 and on Slovenian side from 3 July to 28 August 2023. Within this period, non-binding gas transmission demand indications regarding the respective border were received by both TSOs.

The following table show indications of non-binding demand for firm capacity referred to gas transmission received by Slovenian TSO Plinovodi within the 8 weeks deadline set out as per article 26(6) CAM NC:

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year [yyyy/yy]	Amount [Please indicate unit:] (kWh/d)/y	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2024/25</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2025/26</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2026/27</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2027/28</i>	<i>12,000,000</i>	<i>Yes</i>	<i>2</i>	<i>Partly bundled</i>

<i>Plinacro</i>	<i>Plinovodi</i>	<i>2028/29</i>	<i>12,000,000</i>	<i>Yes</i>	<i>2</i>	<i>Unbundled</i>
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2029/30</i>	<i>12,000,000</i>	<i>Yes</i>	<i>2</i>	<i>Unbundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2023/24</i>	<i>1,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2024/25</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2025/26</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2026/27</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2027/28</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>

* The following standardised period shall be used for indicating the receiving date of the demand indication:

- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year’s yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year’s yearly capacity auction, but that will be considered in this incremental capacity cycle (9 – 16 weeks after yearly auction in year).

The following table show indications of non-binding demand for firm capacity referred to gas transmission received by Croatian TSO Plinacro within the 8 weeks deadline set out as per article 26(6) CAM NC:

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year [yyyy/yy]	Amount [Please indicate unit: (kWh/d)/y]	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2023/24</i>	<i>1,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2024/25</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2025/26</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2026/27</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinovodi</i>	<i>Plinacro</i>	<i>2027/28</i>	<i>7,200,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
<i>Plinacro</i>	<i>Plinovodi</i>	<i>2024/25</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>

Plinacro	<i>Plinovodi</i>	<i>2025/26</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
Plinacro	<i>Plinovodi</i>	<i>2026/27</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>
Plinacro	<i>Plinovodi</i>	<i>2027/28</i>	<i>4,800,000</i>	<i>Yes</i>	<i>2</i>	<i>Bundled</i>

* The following standardised period shall be used for indicating the receiving date of the demand indication:

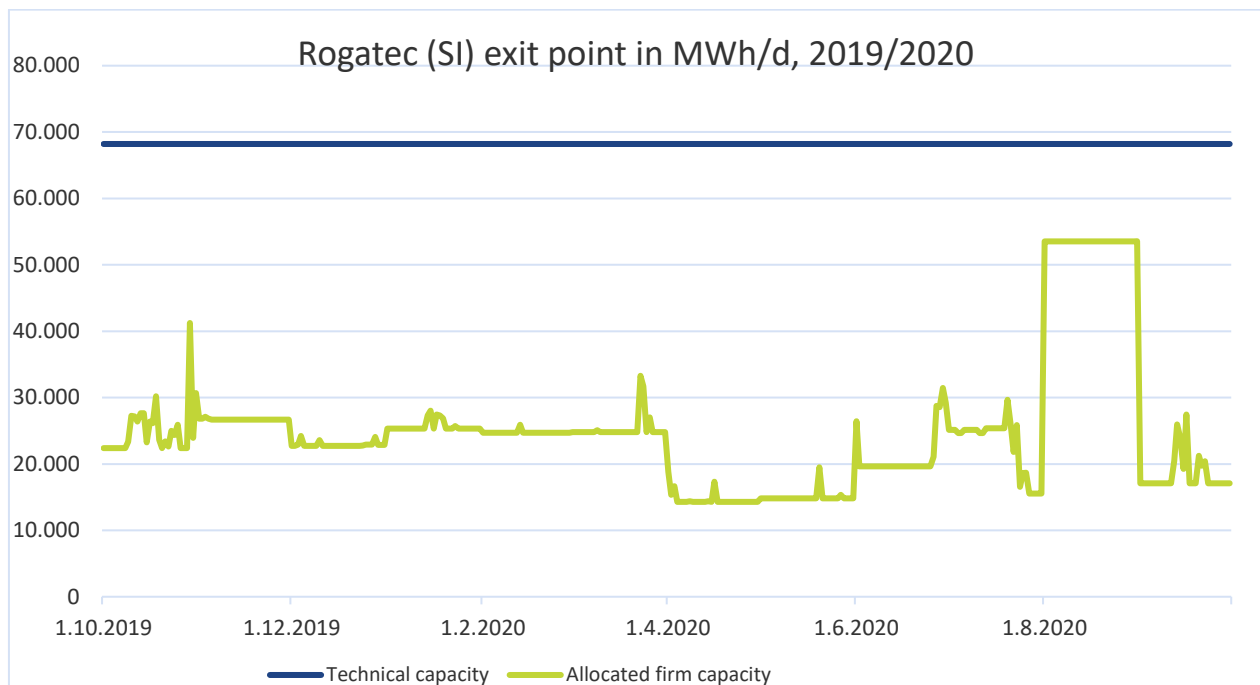
- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year's yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year's yearly capacity auction, but that will be considered in this incremental capacity cycle (9 – 16 weeks after yearly auction in year).

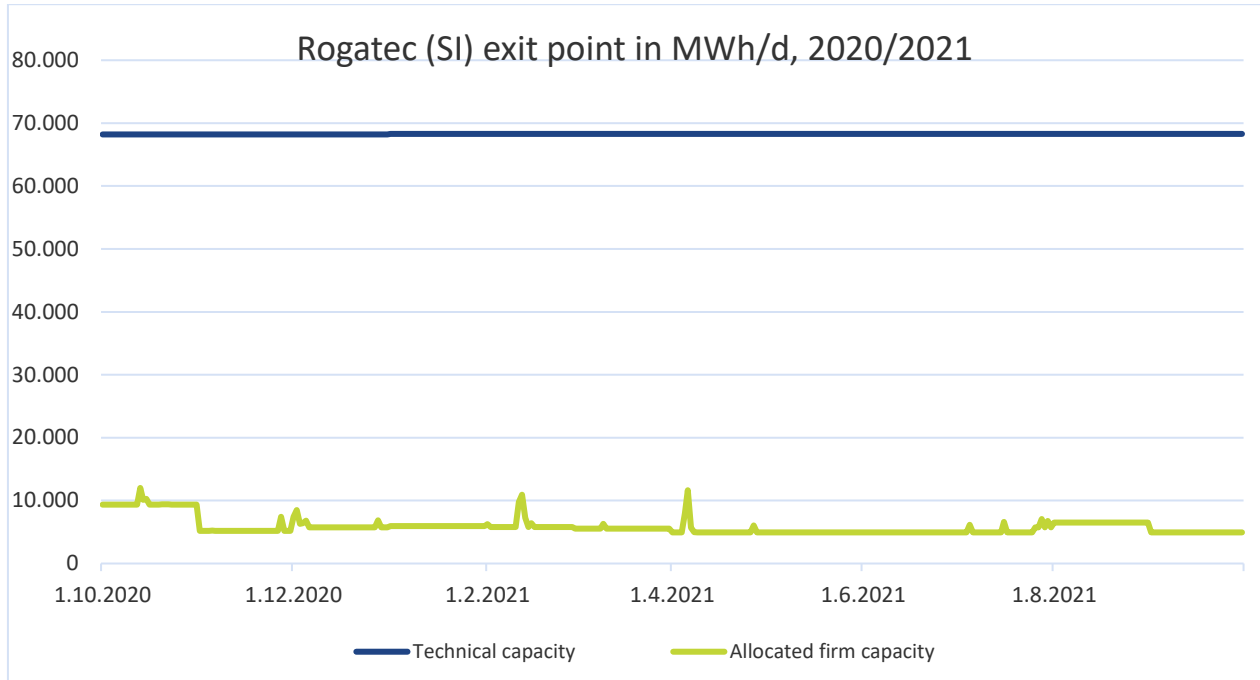
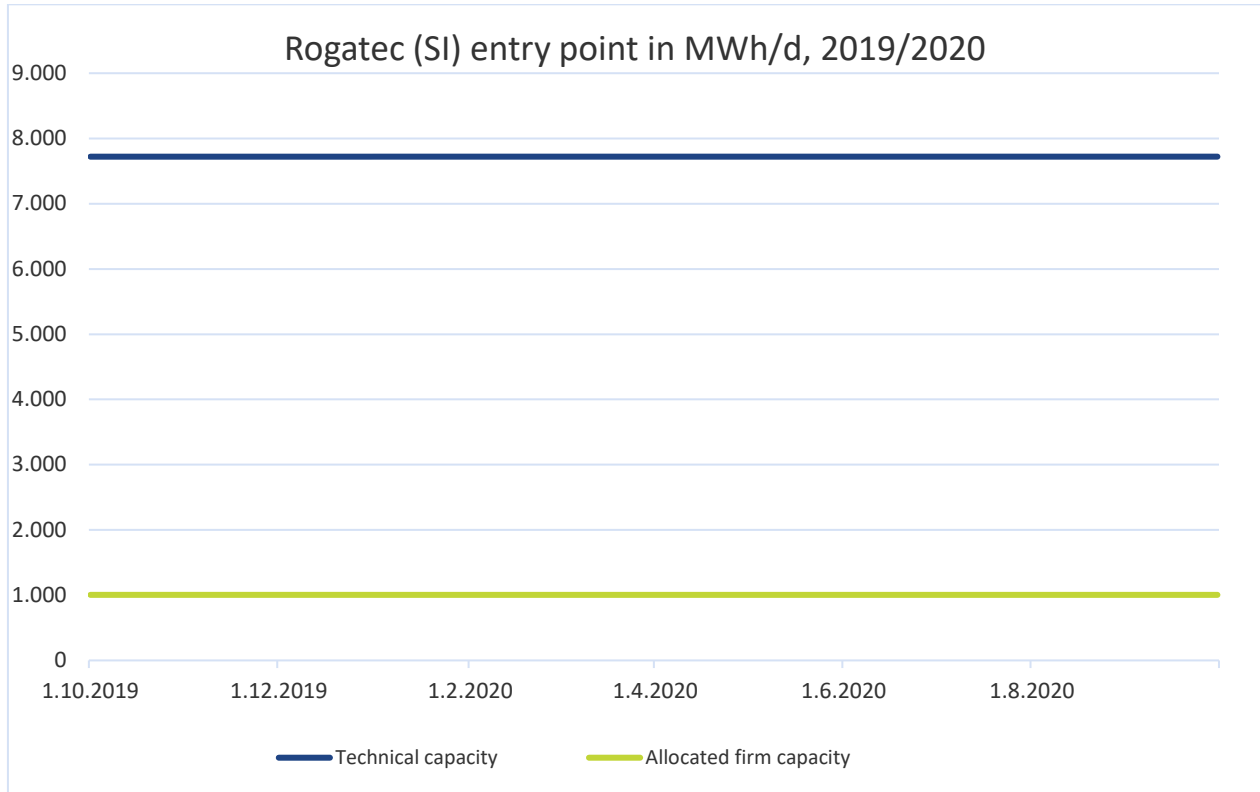
B. Demand assessment

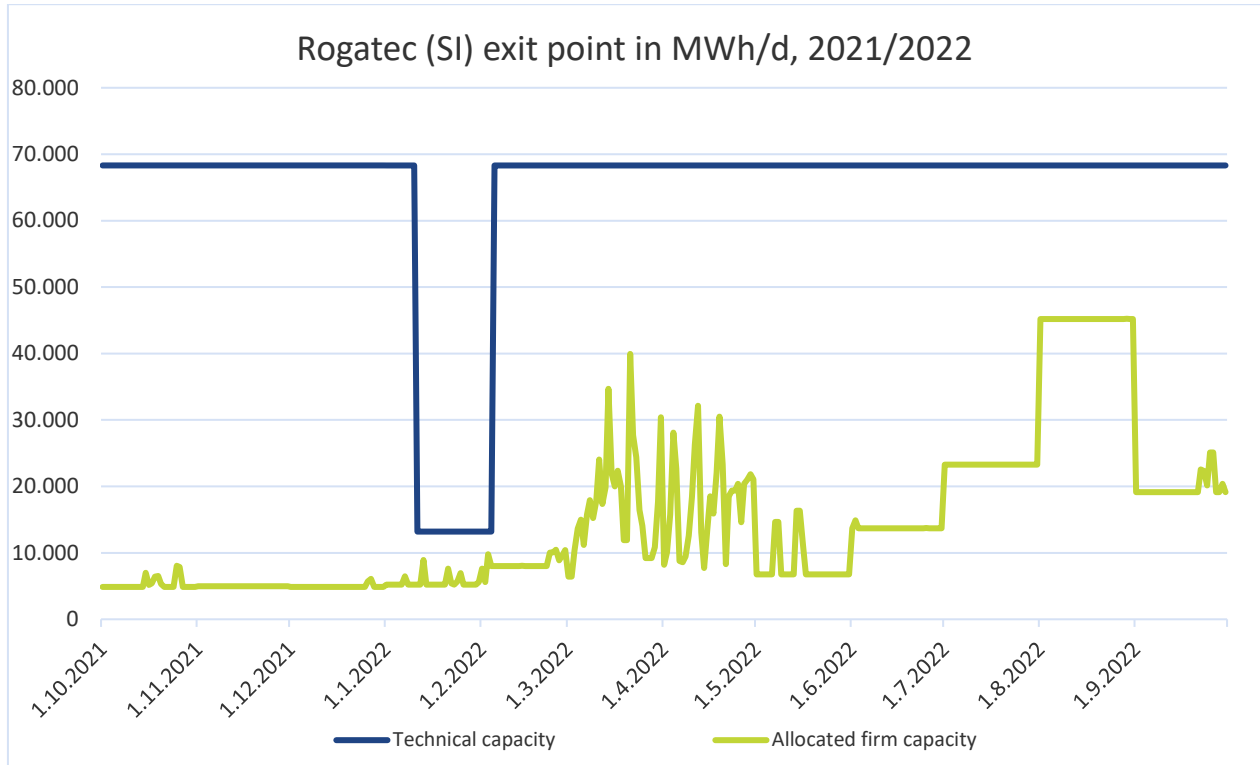
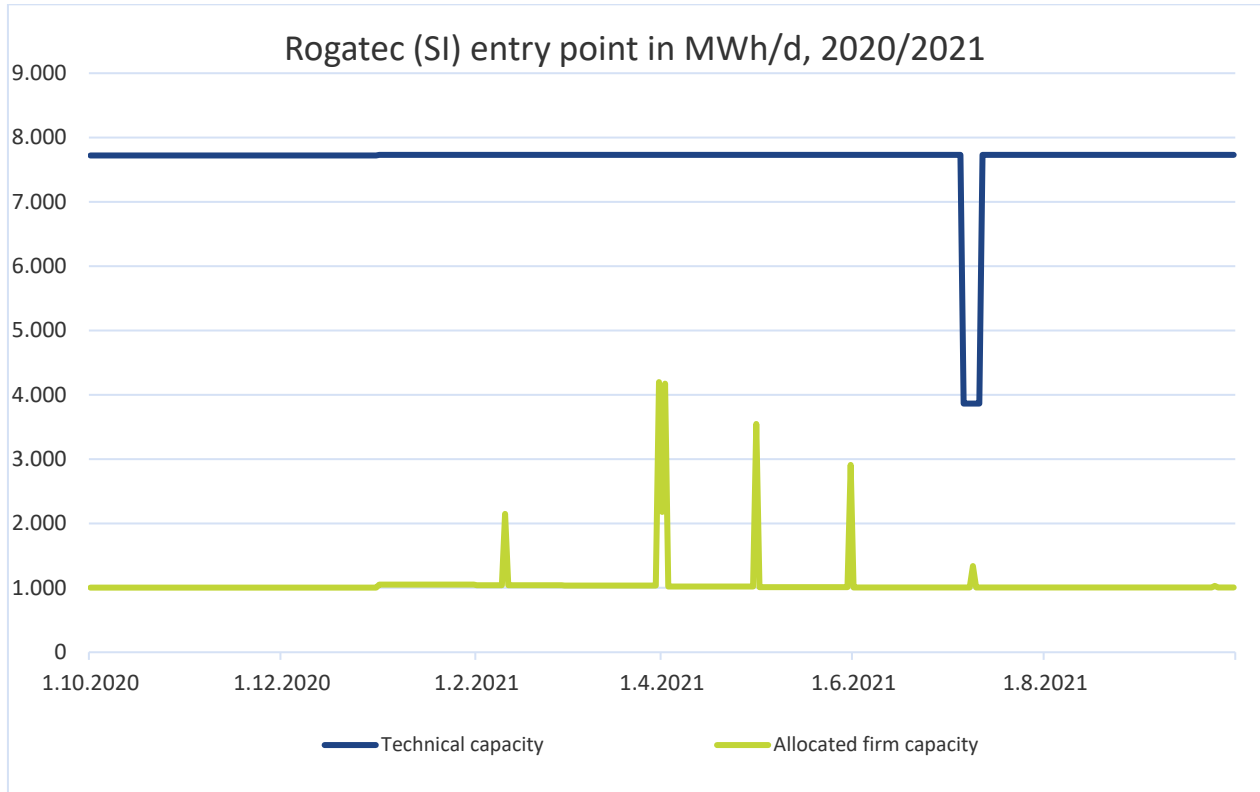
The received demand indications within the current incremental process between the Slovenian Entry-exit system and the Croatian entry-exit system are in the direction HR-SI from 2027 higher than the currently available capacity (i.e. technical capacity which is not yet booked in the long term). Although only the Slovenian TSO received the demand indications above currently available capacity on entry point Rogatec, to react to possible market demand for such capacity, the need to develop incremental capacity is necessary for both TSOs. Capacity information in general can be found on ENTSOG’s Transparency Platform.

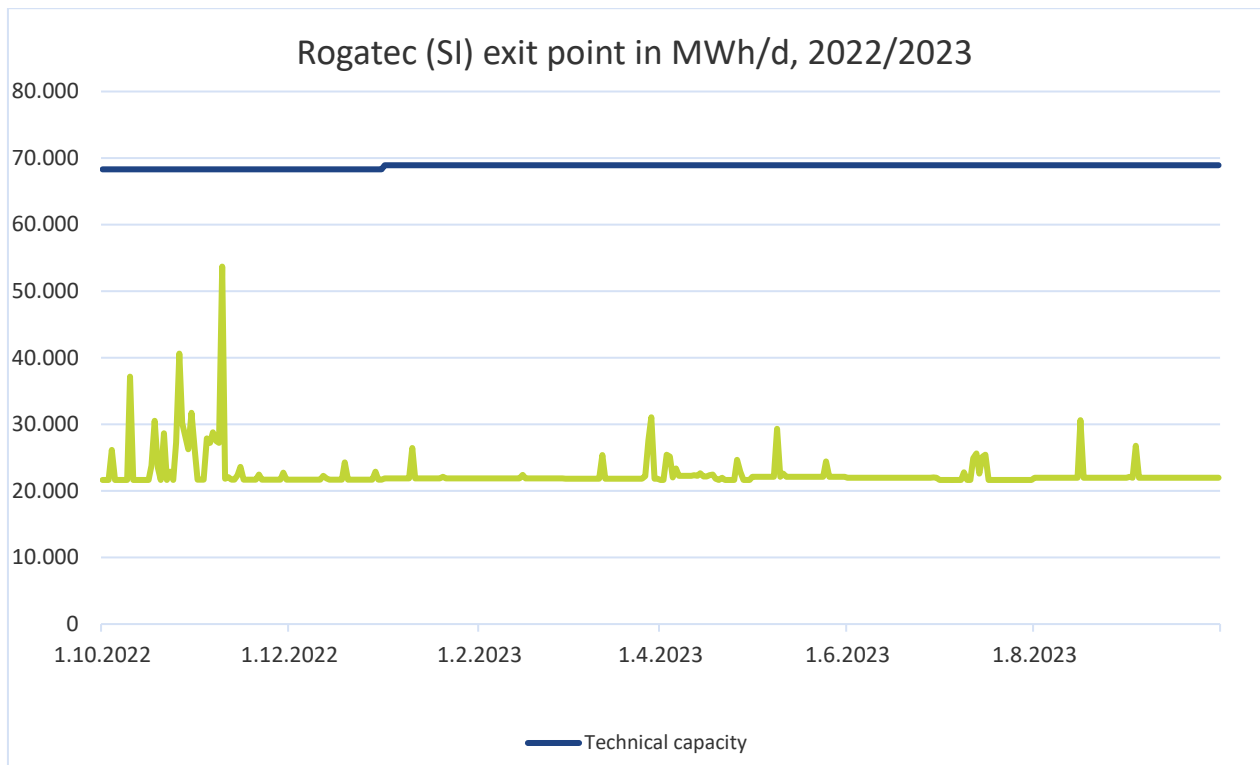
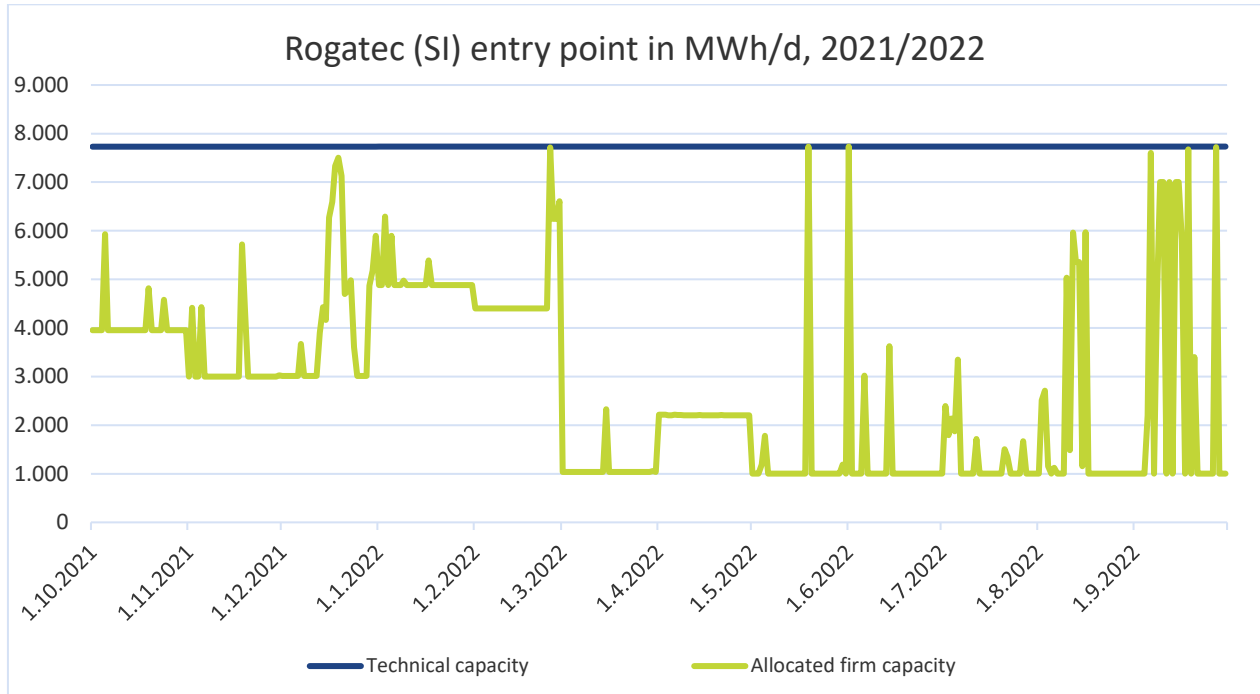
i. Historical usage pattern

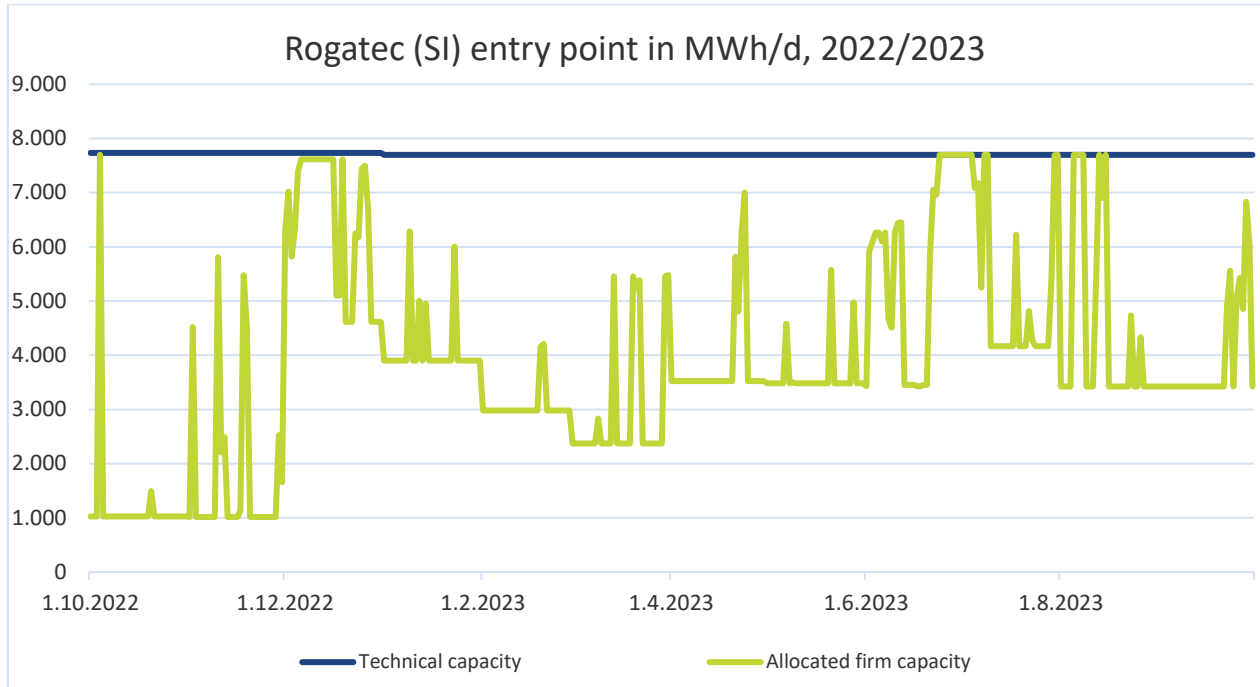
The utilisation of the technical firm capacity at interconnection point Rogatec is presented in the chart below by comparing the technical capacity with the allocated “commercial” flow in MWh/d from 1.10. 2019 to 1.10. 2023.











ii. Results of current annual yearly auction

In the recent annual yearly auctions, taking place on 03. 07. 2023 for the joint interconnection points, the following results have been achieved:

Plinovodi:

Intercon- nection point name	Flow di- rection	Gas year	Offered capacity Amount		Booked capacity Amount	
			Bundled – kWh/h	Unbundled - kWh/h	Bundled – kWh/h	Unbun- dled - kWh/h
Rogatec	SI →HR	2023/2024	2,013,761	570,805	219,000	0
Rogatec	SI →HR	2024/2028	2,013,761	570,805	0	0
Rogatec	SI →HR	2028/2038	1,790,010	507,382	0	0
Rogatec	HR →SI	2023/2024	246,831	0	246,831	0
Rogatec	HR →SI	2024/2028	246,831	0	0	0
Rogatec	HR →SI	2028/2032	214,761	0	0	0
Rogatec	HR →SI	2032/2038	256,556	0	0	0

Plinacro:

Interconnection point name	Flow direction	Gas year	Offered capacity Amount		Booked capacity Amount	
			Bundled – kWh/h	Unbundled - kWh/h	Bundled – kWh/h	Unbundled - kWh/h
Rogatec	SI →HR	2023/2024	2,013,761	0	219,000	0
Rogatec	SI →HR	2024/2028	2,013,761	0	0	0
Rogatec	SI →HR	2028/2038	1,790,010	0	0	0
Rogatec	HR →SI	2023/2024	246,831	43,075	246,831	0
Rogatec	HR →SI	2024/2028	246,831	43,075	0	0
Rogatec	HR →SI	2028/2032	214,761	42,933	0	0
Rogatec	HR →SI	2032/2038	256,556	1,138	0	0

iii. Relations to GRIPS, TYNDP, NDPs

Both TSOs have developed some projects regarding the interconnection point Rogatec, which are also included in the PCI list 2021 as a part of the “Cluster Croatia-Slovenia at Rogatec” (as listed below):

6.26

6.26.1 Cluster Croatia — Slovenia at Rogatec, including:

- Interconnection Croatia — Slovenia (Lučko — Zabok - Rogatec)
- Compressor station Kidričevo, 2nd phase of upgrade (SI)
- Upgrade of Rogatec interconnection

Both companies also included their projects in the National TYNDPs, ENTSOG TYNDP and GRIPs

iv. Expected amount, direction and duration of demand for incremental capacity

Future demands for the direction HR-SI at IP Rogatec are relatable with the sources of natural gas ie. LNG Terminal Krk, IAP or potential new gas flow in direction HU-HR-SI etc.

C. Conclusion for the (non)-initiation of an incremental capacity project/process

According to the assessment result of the non-binding demand indications, the historical usage patterns and the results of the latest annual auctions, incremental capacity needs to be developed; therefore, incremental capacity process will be initiated.

After the start of war in Ukraine, the European Union, which meets more than 40% of its gas needs, 27% of its oil needs, and 46% of its coal needs from the imports from Russia, has become increasingly aware of the need to reduce its dependence on Russia. It plans to achieve this with the REPowerEU plan, which was published on May 18, 2022.

Along with emphasising the accelerated decarbonization of the energy sector, special attention is paid to the accelerated diversification of natural gas supply, for which, in addition to investments in existing PCI projects, investments in additional projects that can provide enhanced security of gas supply, especially in Central and Eastern Europe and in the northern Germany are planned.

At the Commission's request, the European Network Transmission System Operators for Gas (ENTSO-G) adopted an assessment of additional requirements for gas infrastructure per region. Thus, the LNG terminal on the island of Krk was singled out among the key priority gas infrastructure projects in Central and Southeastern Europe that were put into operation in 2020 and 2021. Furthermore, it was concluded that among other projects in the region, in the medium term, an expansion of the capacity of the LNG terminal in Krk will further help mitigating Russian supply dependence, but to reap these benefits, it would be necessary to enhance the Croatian transmission grid towards Slovenia and Hungary.

Following the recommendations presented in the REPowerEU Plan, the Croatian operators initiated the expansion of the capacity of the LNG terminal on the island of Krk and the construction of the Zlobin-Bosiljevo gas pipeline. Apart from the stated, already initiated projects, the construction of the Lučko-Zabok gas pipeline, which is to enable transmission of natural gas from Croatia to Slovenia at the interconnection point Rogatec, in the maximum amount of 1.5 billion cubic meters per annum, has been nominated for the financing by the Recovery and Resilience Facility.

Should the European Commission approve the funds for the construction of the Lučko-Zabok gas pipeline the gas pipeline will be constructed by the end of 2026, and it will not be necessary to initiate the procedure for increasing the capacity at the interconnection on the Croatian side. If the funds are not approved the procedure for increasing the capacity at the interconnection will be initiated based on the expressed non-binding interest.

Current Slovenian entry capacity depends on Croatian exit capacity and could be increased to certain extent within regular maintenance upgrades. For the maximum amount of 1.5 billion cubic meters per annum additional investments are needed.

Based on the aforementioned decision, additional technical studies for incremental capacity projects will be conducted.

According to the received demand indications, Plinovodi envisages capacity levels to be indicated as demand levels of 1.1 billion cubic meters per annum, 1.5 billion cubic meters per annum and potentially higher.

D. Provisional timeline

The timeline will follow the requirements of the Article 27, Regulation 2017/459.

Milestone	Plan date (per 23 October 2023)
Design phase completed	15 January 2024
Public consultation completed	15 March 2024
Incremental auction completed	July 2025
Start of operational use	December 2026

E. Interim arrangements for the auction of existing capacity on the concerned IP(s)

Not applicable.

F. Fees

For the incremental capacity cycle addressed by this report, involved TSOs did not introduce a fee for the evaluation and processing of non-binding demand indications.

G. Contact information

Plinovodi d.o.o.

Urška Gabrovšek

Head of Marketing and Regulation Department

Marketing and Regulation Department

+386 40 754 412

+386 1 5820 696

urska.gabrovsek@plinovodi.si

Cesta Ljubljanske brigade 11b

1001 Ljubljana

Slovenia

Plinacro Ltd.

Robert Bošnjak

Head of Strategic Development Business Unit

+385-1-6301-752

robert.bosnjak@plinacro.hr

Savska cesta 88a

10000 Zagreb

Croatia