



## MONITORING REPORT OF FINNISH IMPLEMENTATION PLAN

This memorandum describes the results of the monitoring on the Finnish Implementation Plan as part of the capacity mechanism in accordance with Article 20 of Regulation 943/2019. The implementation plan was published on 29.1.2022. This is the first monitoring report.

### Changes in the policy environment

1. What are the changes in the policy environment that have taken place since the implementation plan (or last Monitoring Report), e.g. recent updates/developments/ changes/highlights/ targets of the national electricity market (with reference to the final National Energy and climate plan (NECP))?

The energy crisis has had a significant impact on the Finnish electricity system as well. In the wake of the Russian attack, Finland was the first country to be hit with the Russian sanctions on energy when Russia ban the export of wood chips to “hostile countries” in March 2022. This had an impact especially for the CHP generation in the Eastern Finland. Then, in May 2022, the import of electricity from Russia ended which cut around 1400 MW of capacity from the system. Also gas imports ended in May 2022 hampering fuel sourcing for gas fired power plants (ca. 1500 MW). The Olkiluoto 3 NPP (1600 MW) has encountered several delays and instead starting operations in the Autumn, the start is now scheduled for March 2023. In addition, during Autumn, the water reservoir levels in the Nordics were low and there were several problems with Swedish nuclear power plants increasing the price for the whole Nordic region.

These developments have had a significant effect on the security of supply situation in Finland. Most of these effects have also been highlighted in the sensitivities of our National Resource Adequacy Assessment but due to the approach adopted by the Commission, Finland was not allowed to dimension its strategic reserve based on these circumstances.

To alleviate the shortage in gas supply, Finland reacted quickly and was able to procure a floating storage regasification unit (FSRU) which arrived in Finland in December 2022 and was taken in operation in January 2023.

The strategic reserve scheme got its state aid approval finally in September 2022. However, during the procurement of the reserve Energy Authority (competent authority for the scheme) disqualified the sole offer for the capacity for not fulfilling the requirements. Thus, no capacity was procured for the period 2022/-23. Luckily, due to the high prices, the capacity owner prepared the power plant for continuous operation and operates the plant currently in the markets.

The government launched an energy savings campaign in early Autumn. Together with the high prices, the campaign has had a significant

effect on electricity consumption. Based on the methodology of Council Regulation (EU) 2022/1854, consumption decreased in November 9,95 %, in December 8,00 %) and January 11,79 % and the peak demand by 7-10 %. The weather has luckily been on the mild side after the cold spell in November-December.

2. What are the key figures about the national electricity system (e.g. electricity consumption, production, cross-border trade, etc.)?

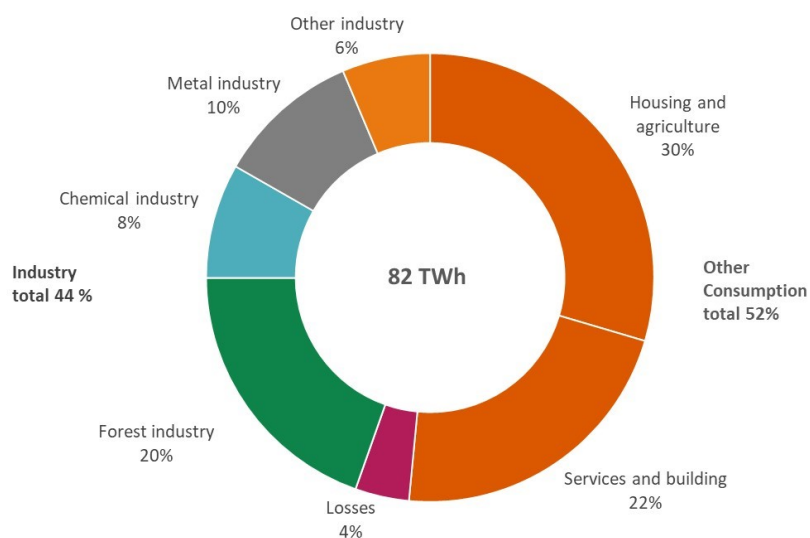


Figure 1. Electricity consumption in 2022. Source: Finnish Energy

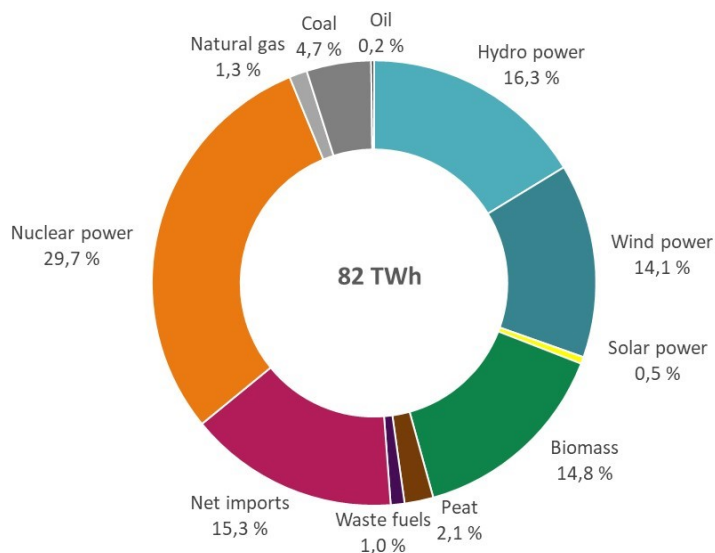


Figure 2. Electricity by energy source 2022. Source: Finnish Energy

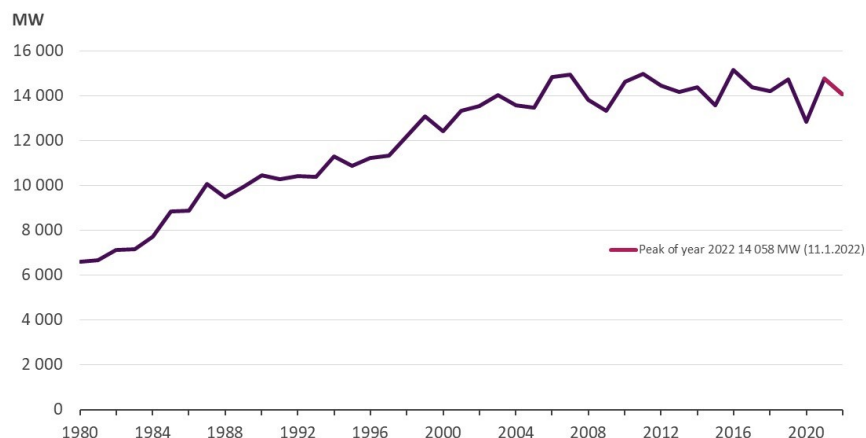


Figure 3. Peak load of electricity 1980-2022. Source: Finnish Energy

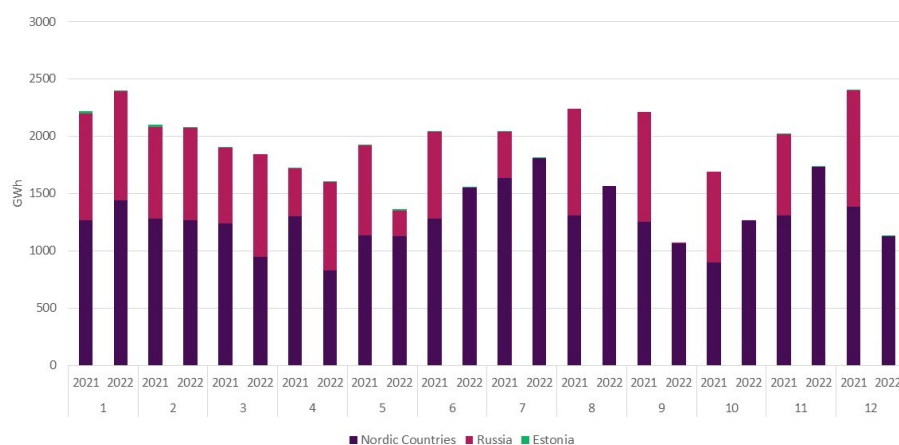


Figure 4. Electricity imports to Finland, monthly comparison between year 2021 and 2022. Source: Finnish Energy



Figure 5. Annual electricity spot prices 2013-2022. Source: Finnish Energy

## Overview of the progress and measures

3. What are the measures provided in the final implementation plan, and were any changes made to those? If yes, why was that change made?

Measures in the final implementation plan:

- Implementation of Electricity Market Directive
- Nordic aFRR capacity market
- Single price model for imbalance settlement
- Analysis and consultation on national solutions for scarcity pricing in balancing in Finland by Fingrid
- Renewal of power reserve legislation in line with Electricity Market regulation
- Implementation of Smart Grid Working Group's recommendations
- Analysis of alignment of implementation plans on scarcity pricing between Finland and Sweden by Fingrid
- Introduction of 15 minutes imbalance settlement period

No changes to the plan has been made.

4. What is the status of the measures listed in the final implementation plan? Which actions were taken? Please refer to relevant national regulations, legislation or other documentation describing the concrete measures taken so far.

Table 1. Overview of measures listed in the final implementation plan, actions taken & timeline

Topic/ Measure	Changes	Status	Action taken	Impact on adequacy concern	Timeline
Implementation of Electricity Market Directive	NO	Delayed	Implementation in several parts. Many recommendations were implemented by Act 730/2021 and degree 767/2021. Government proposal HE 318/2022 was sent to the parliament in Dec 2022	mild	Timeline in implementation plan: 2020. Partly implemented in 2021, other changes postponed due to acute energy crisis management. Parliament approval estimated on Mar 2023
Nordic aFRR capacity market	NO	Operational	Market go-live in Dec 2022	mild	Timeline in implementation plan: 2020. Some delays in the implementation, now the Nordic market is operational
Single price model for imbalance settlement	NO	Operational	Legislative framework set up in government degree 767/2021. Launch of single price model in Nov 2021	mild	Timeline in implementation plan: 2021. Launched as planned.
Analysis and consultation on national solutions for scarcity pricing in balancing in Finland by Fingrid	NO	Done	Fingrid has conducted analysis and carried out public consultation on national solutions for scarcity pricing.	none	Timeline in implementation plan: 2021. Analysis and consultation conducted 2021-2022
Renewal of power reserve legislation in line with Electricity Market regulation	NO	Operational	Act (1239/2021) in force since Dec 2021	large	Timeline in implementation plan: 2021. Legislation adopted as planned.

Implementation of Smart Grid Working Group's recommendations	NO	Delayed	Implementation in several parts. Many recommendations were implemented by Act 730/2021 and degree 767/2021. Some recommendations are currently debated in the parliament (HE 318/2022). Two recommendations pending (clarification on power based DSO tariffs, load control through smart meters)	mild	Timeline in implementation plan: 2021. Delay due to acute energy crisis management and partly due to lack of clarity on feasibility of certain solutions. Implementation of remaining two proposals open as there are elections on April 2023.
Analysis of alignment of implementation plans on scarcity pricing between Finland and Sweden by Fingrid	NO	Delayed	Analysis of alignment of scarcity pricing between Finland and Sweden is carried out at the moment	none	Timeline in implementation plan: 2022. Common analysis was started in 2022 and is being discussed among the Nordic TSOs. Finalisation of the analysis expected during 2023.
Introduction of 15 minutes imbalance settlement period	NO	In time	Legislation set in 2021 by government degree 767/2021 with deadline of for implementation for the market participants on May 2023.	mild	Timeline in implementation plan: 2023. Implementation by the market participants is going to the plan, no delays foreseen.
Nordic mFRR capacity market	NO	In time	Nordic TSOs plan to launch the market in Q4/2023	mild	Timeline in implementation plan: 2024. TSO project going according to plan. However, the required data systems are challenging.
Third AC interconnector between Finland and Sweden	NO	In time	CEF-funding granted, construction started.	large	Timeline in implementation plan: 2025. Project going as planned.

### Resource adequacy

5. Have there been any updates regarding the resource adequacy level in your country? If yes, how did the measures impact the adequacy concern? Which reforms, in particular, contributed to alleviate those adequacy concerns?

The reliability standard in accordance with Article 25 of the regulation 2019/943 was first set to 3 h (LOLE) and 1800 MWh (EENS) by a government decision in principle on 8.7.2021. The reliability standard was updated to 2,1 h and 1100 MWh by a new decision in principle on 17.3.2022.

Energy crisis hit Finland hard and based on the internal analysis the situation was even worse than shown in the sensitivities of the National Resource Adequacy Assessment. No new official analysis were carried out.

### Forward-looking planned actions

6. Which actions are planned when looking forward, as from the last report? We recommend covering the topics of the Market Reform Plan, including the same sections i) general wholesale market conditions, ii) balancing markets and ancillary services, iii) demand side response, iv) retail markets: regulated prices, v) interconnections and internal grid capacity, etc. Please use the same chronology as used in the Market Reform Plan.

Fingrid has started planning of new interconnectors to Sweden and Estonia together with the Swedish and Estonian TSOs. These projects have applied for PCI status. These projects are still in very early stage and will materialize only after 2030.

The amount of wind generation is growing rapidly (1000 MW to 2000 MW per year for at least next few years) helping also somewhat in the adequacy situation. However, due to the intermittent nature of the generation the effect is low.

During November and December 2022 demand responded strongly to the high prices. In addition, Fingrid created a voluntary power system support procedure, where larger energy users could commit in reducing electricity use in scarcity situation. Thus far, over 500 MW of capacity has committed to the procedure.

7. Are any delays expected in implementing the measures? What are the reasons for the delay, and which measures will be taken to address this?

Please see table 1 for timing of the measures.

There has been several delays in passing certain pieces of legislation, especially considering the implementation of Electricity Market Directive. The implementation has been done in several parts and final implementation is foreseen during March 2023. The delays were caused by first by Covid measures taking the focus on the political side. Thereafter, further delays were caused by the emergence of energy price crisis in 2021 and further exacerbated by the Russian attack in 2022.