Ways to advance wind power construction in Finland

Results of the Government funded study

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Wind Finland

Ways to advance wind power construction in Finland

- ✓ A Government's analysis, assessment and research project
- ✓ An interdisciplinary working group: FCG VTT HPP ASIANAJOTOIMISTO KPMG ILMATIETEEN LAITOS

- ✓ Steering group included Ministry of the Environment, Ministry of Economic Affairs and Employment, Ministry of Justice, Ministry of Defence
- ✓ Duration: 2/2020 - 6/2021

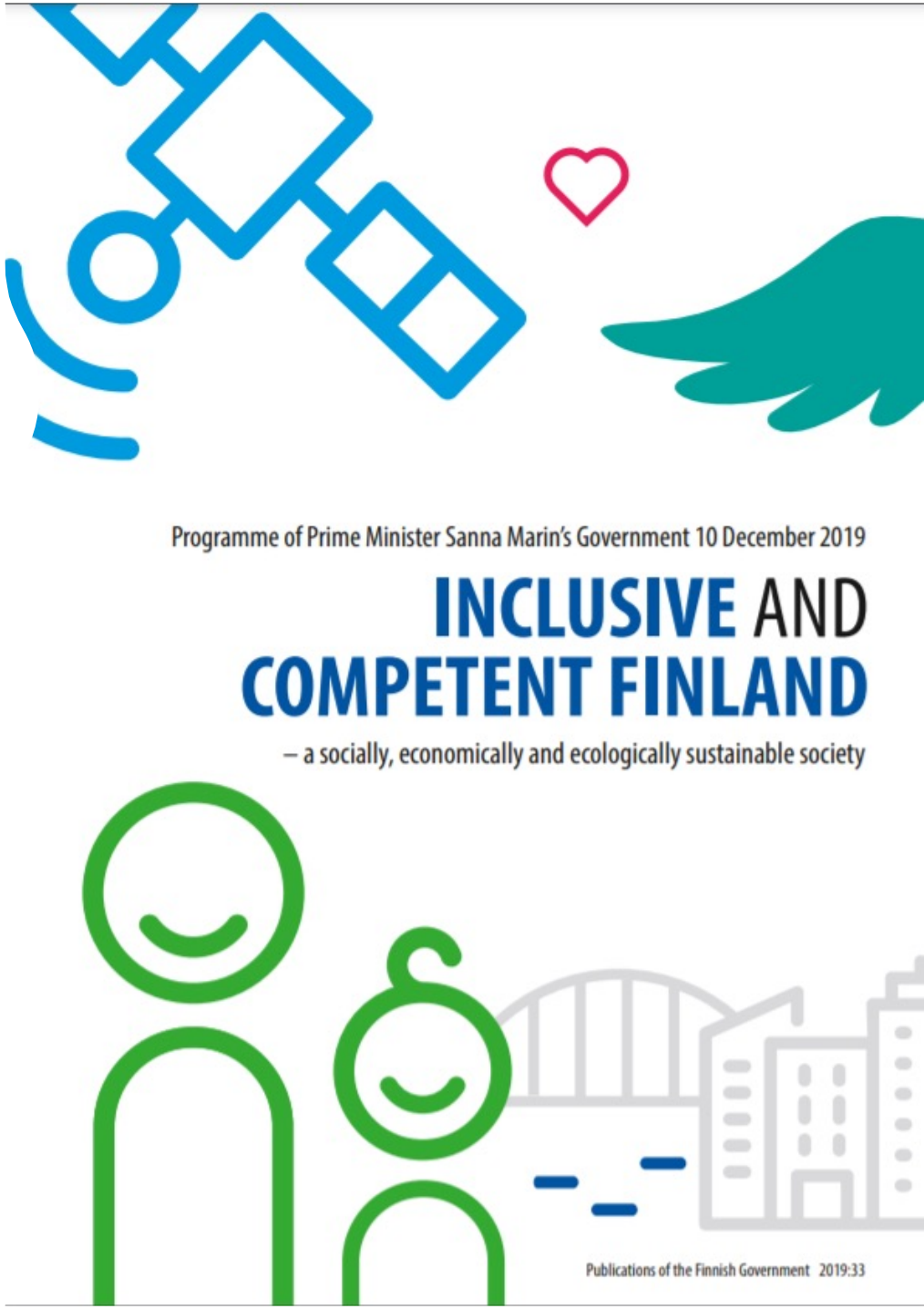
- ✓ The report and three Policy Brief documents with the summaries of recommendations can be found online (in Finnish)

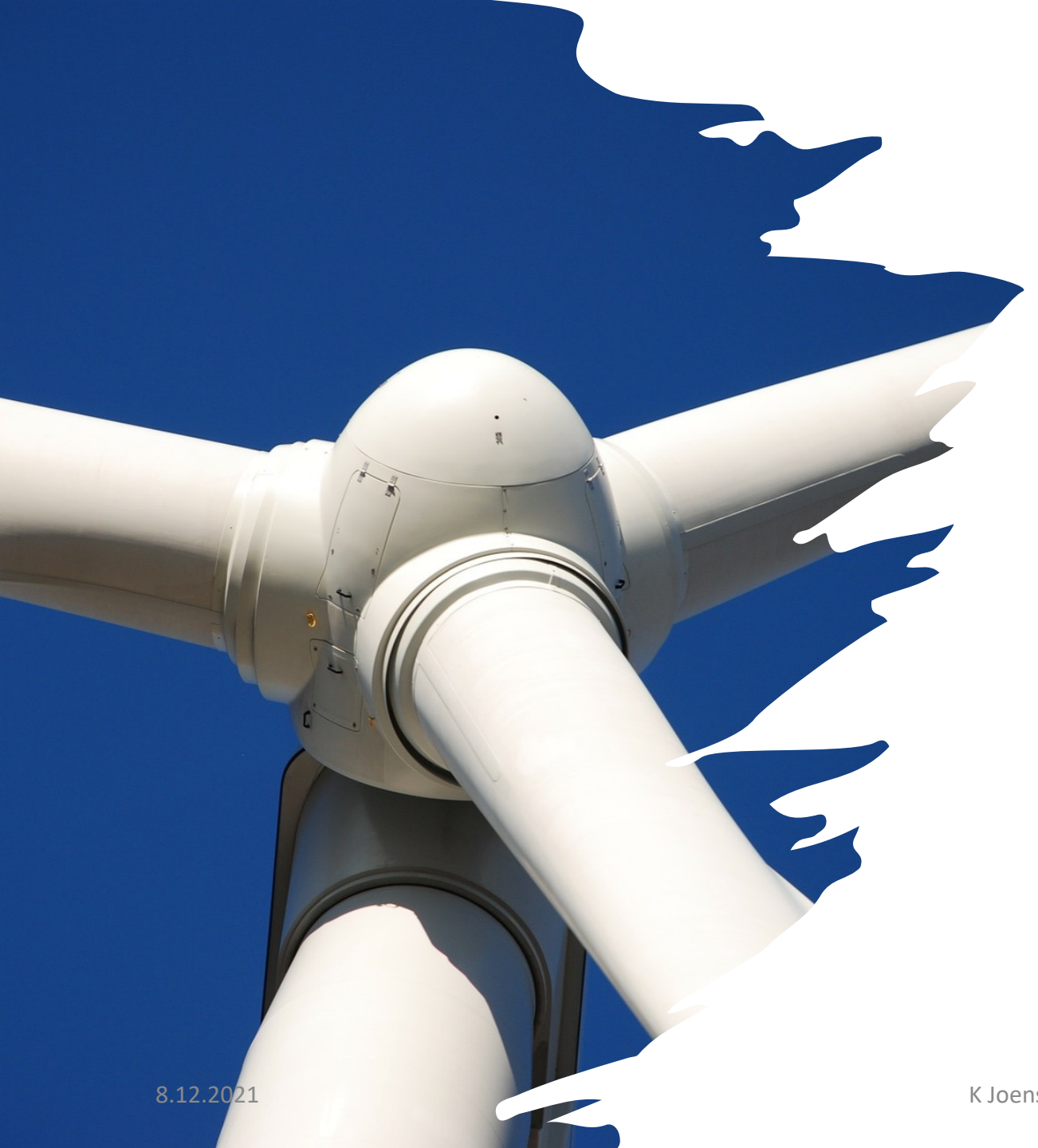
Statements from the Government programme 2019

"We will increase the proportion of energy produced using wind power in Finland. We estimate that the amount of wind power produced on land will rise according to market conditions. **We will improve the conditions for the construction of offshore wind power plants. We will remove the administrative, zoning-related and other barriers to wind power construction. We will explore the possibilities to loosen the restrictions on wind power due to radars.**"

"**We will provide property tax relief for offshore wind power plants.**"

Programme of Prime Minister Sanna Marin's Government 2019
Inclusive and competent Finland – a socially, economically and ecologically sustainable society





Three research packages

1. Coordinating wind power and Defence Forces territorial surveillance (technological and juridical perspectives), as well as coordination with weather radars
2. Streamlining of planning and permitting of onshore and offshore wind projects, taking into account the rapid technological development
3. Improving the economic viability of offshore wind power (e.g property tax)

Coordination of wind power with the territorial surveillance

- ✓ The study included a technical and a regulative review – with the aim to find new solutions for the coordination and to streamline the process related to the statement of the Defence Forces

- ✓ There are areas in Finland where it is difficult to find technical solutions to construct wind power due to restrictions related to the Defence Forces territorial surveillance.
- ✓ Wind power projects need an approval of the Defence Forces. The current practical consultation procedure is not directly based on any provision. The procedure should be defined in legislation.

Streamlining planning and permitting of wind power projects

- ✓ Clearly defined, efficient processes have been promoted and for some parts put in force also before – “low hanging fruits” have for many parts been picked already
- ✓ After dozens of interviews and a workshop with different stakeholders, 15 recommendations were given as a result of the study
  - ✓ Recommendations relate to permitting procedures and related practices, necessary guidance and dialogue between authorities and project developers

Streamlining planning and permitting of wind power projects – recommendations

- ✓ The rapid development of wind power technology is necessary to be considered in the permitting procedures even better than nowadays
- ✓ Selected related recommendations:
  - ✓ Guidance and supporting practices to make sure that the general plans allow changes in the exact turbine locations
  - ✓ Clear guidance on that the capacity of turbines should not be included in the general plan regulations
  - ✓ The 45MW limit for the EIA procedure should be studied in terms of the environmental impacts of the project. To be removed if possible (only number of turbines relevant)
  - ✓ Instructions from Traficom and ANS Finland on the changes of turbine locations that are possible without requesting a new statement or permit
- ✓ Especially smaller municipalities need more guidance on combining the EIA with the general planning process to avoid unnecessary delays

Streamlining planning and permitting of wind power projects – recommendations for offshore

- ✓ It is recommended that the law on the exclusive economic zone to be amended so that it provides the order of precedence in a way that the party who has obtained the right of exploitation (in accordance with section 6) would have the priority in applying for the consent to build (similar activity) (in accordance with section 7)
- ✓ The process of permitting offshore, especially in the exclusive economic zone, and the responsibilities of different authorities should be described in a comprehensive manner. A practice of prior negotiations between project owner and all related authorities is recommended

Improving the economic viability of offshore wind power

- ✓ The study concentrated on other ways to improve the economics than ones considered to be State aid
- ✓ The change in property tax proposed by the government will improve the economic viability of offshore wind power
- ✓ The level of compensation / the method for determining the level of compensation to be paid by the wind power producers on the state-owned sea areas should be made transparent
- ✓ To ensure the growth of offshore wind in Finland, it is important that not only the state-owned Metsähallitus has the possibility to develop projects offshore
- ✓ The possibility of using state-backing needs to be further explored as an additional guarantee for PPAs of medium-sized companies or, more generally, as an additional guarantee for the loan financing of offshore wind projects

Grid connection of offshore wind

	Grid Connection			Electricity generation
	Super-shallow model = the wind power producer to pay the cost of connecting to an offshore substation	Shallow model =the wind power producer to pay the cost of connecting to an onshore substation	Deep model = the wind power producer to pay the total grid connection cost, including needed enforcements on grid capacity	Subsidies for wind electricity generation
Finland				No support
Sweden	Government decision made October 2021			Green certificate
Great Britain				CfD
Germany				Price premium
Denmark				CfD (tender) / price premium (open-door)
Belgium				Green certificate
Netherlands				Price premium / no support

Grid cost allocation models and subsidy systems for electricity generation for offshore wind power in Finland, Sweden and the five largest offshore wind countries in Europe (Baltic Integrid, 2018, Navigant Netherlands BV, 2019).

In addition to the results presented in the report, the study also served as a platform for discussion between various stakeholders involved in wind power construction, those responsible for the projects and the various authorities.

The regulations and guidelines for wind power construction developed during the study and the development is likely to continue at a rapid pace.

Thank You!