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OX2
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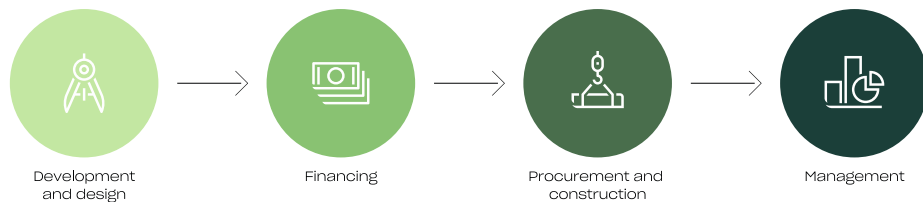
Lestijärvi wind farm

Development of the largest wind farm in Finland



Company overview

- Established 2004 and has approx. 250 employees in the Nordics, Lithuania, Poland, France, Romania and Italy.
- OX2 develops and sells wind and solar farms
- We strive towards a 100% sustainable and renewable energy sector
- Supplier independent
- In 2020, net sales totaled SEK 5,201 million
- The project development portfolio amounts to 17,1 GW



Map of OX2's market presence



A leading provider of high-performance renewable energy assets

989 MW under construction

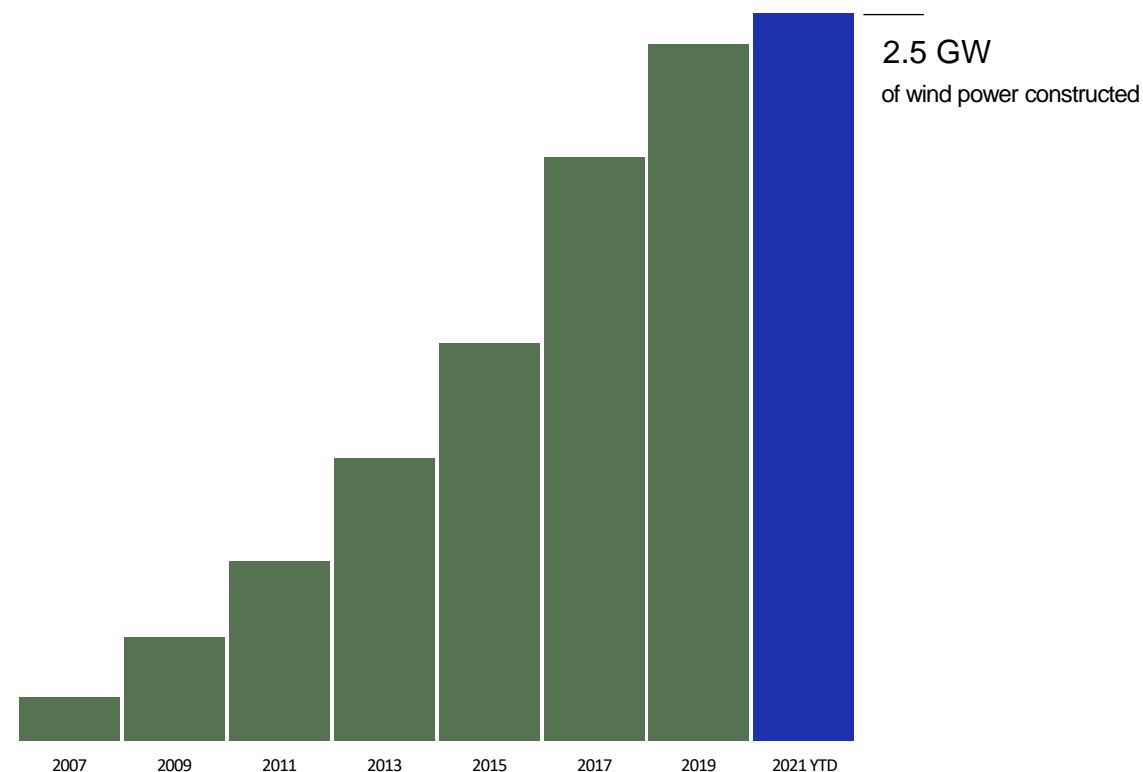
~ 2,5 GW of wind power constructed last 16 years

~ 2,5 GW of technical and commercial management

Largest supplier of EPC contracts for wind farms in the Nordics

More than 250 engineering, finance, development and construction project management professionals in the Nordics, France, Poland, Lithuania, Romania and Italy.

Over 16 years of TCM experience in the Nordics with offices in Sweden, Finland and Lithuania



OX2 in Finland

- OX2 entered Finnish market in 2012
- Wind farms in Finland
 - 8 in operation
 - 7 in construction phase
 - 3700 MW in development phase
- 40 employees
- Offices in Helsinki, Oulu and Tampere



Lestijärvi wind farm overview

The largest wind farm in Finland

- 69 wind turbines
- Tip height 240 meters
- Total power ~400 MW
- Annual electricity production ~1,4 TWh
- 2 new overhead power lines (110 kV & 400 kV)

Financial facts

- Estimated total investment 500 m€
- Completely subsidy-free project
- Annual real estate tax 2,5 m€



Image source: Wikipedia

Lestijärvi municipality

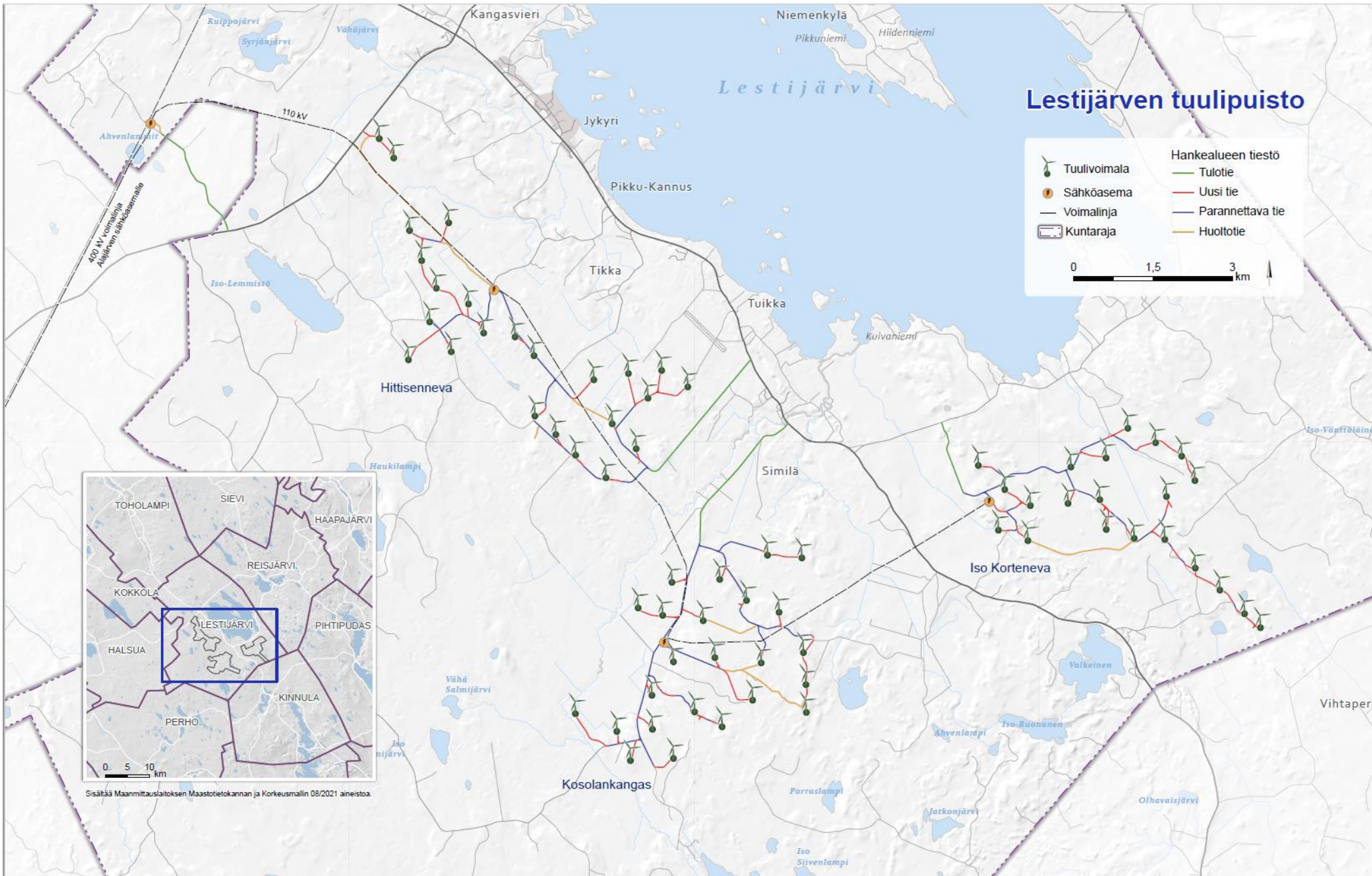
- Located in Central Ostrobothnia
- 720 inhabitants
- Named after lake Lestijärvi

Map of the project areas



Project facts

- 69 turbines in 3 sub areas
- Total land area: 8000 ha
- 200 land owners
- 7 private road associations



Development history 1/2

- **2012: Project kickoff**
 - Initiated by a local entrepreneur Aki Simunaniemi
 - 80 first land lease agreements signed
 - Municipality actively involved
- **2013 - 2014: Early development**
 - Project rights acquired by YIT
 - Environmental impacts assessment (EIA) completed
 - EIA originally included up to 121 wind turbines
- **2014 – 2015: Land use planning (LUP)**
 - Three separate LUP:s accepted in 2015
 - LUP were appealed against (gained legal validity in 2018)
 - LUP final version had 98 wind turbines (3 removed after appeals)



Development history 2/2



- **2014 – 2015: Wind measurements (3 masts)**
- **2015 – 2019: Grid design and permitting**
 - EIA for 400 kV line completed and route designed
 - Expropriation permits for 110 & 400 kV lines granted
- **2019: Building permits**
 - YIT was granted building permits for 72 turbines
 - Tip height was increased from 210m -> 240m
 - Substation permits granted
- **2021: OX2 acquired project rights from YIT**
 - Detailed technical and construction design
 - Layout and permits updated, 3 turbines removed
 - Investment and financing process started



Project status and next steps

- All permits and land rights are secured for construction
- OX2 is currently negotiating with potential investors, contractors and wind turbine suppliers
- 5-7 main contractors to be selected in the tendering process
- Target is to secure financing and start construction by the end of 2021
- Construction phase 2021 – 2024
- Commercial operation 2024 –



Construction phase



- Construction phase takes 3 years
- 350 workers employed during construction
- Target timeline:
 - 2021 - 2023: Civil works
 - 2022 – 2023: Foundation works
 - 2023 – 2024: Turbine installation
- Special cranes are used for turbine erection and blade installation
- Overhead lines will be constructed simultaneously with the wind farm



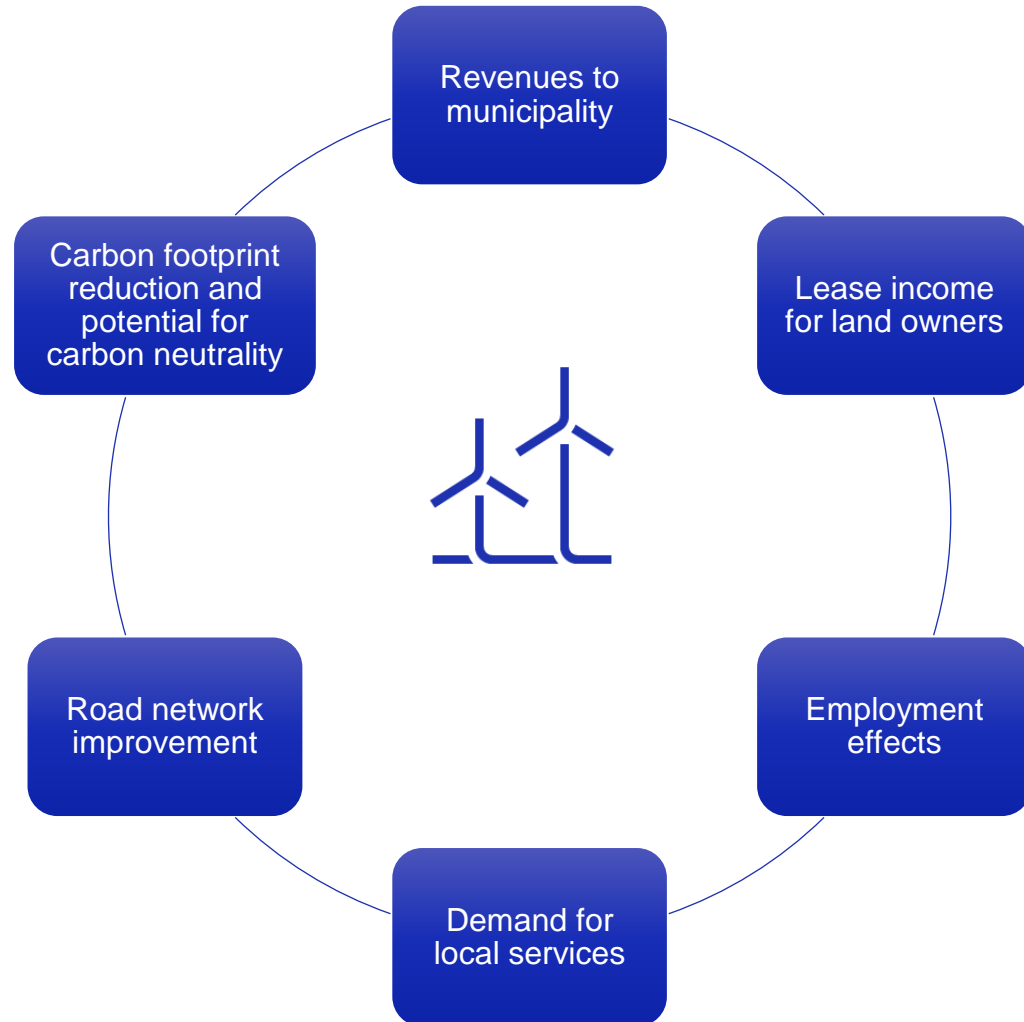
Operational phase

- Operational period lasts 35 years
- 30 – 50 workers employed regularly during operation
- OX2 will be the technical and commercial manager for the upcoming wind farm owner
- Forestry, agricultural and recreational use allowed normally during operational phase



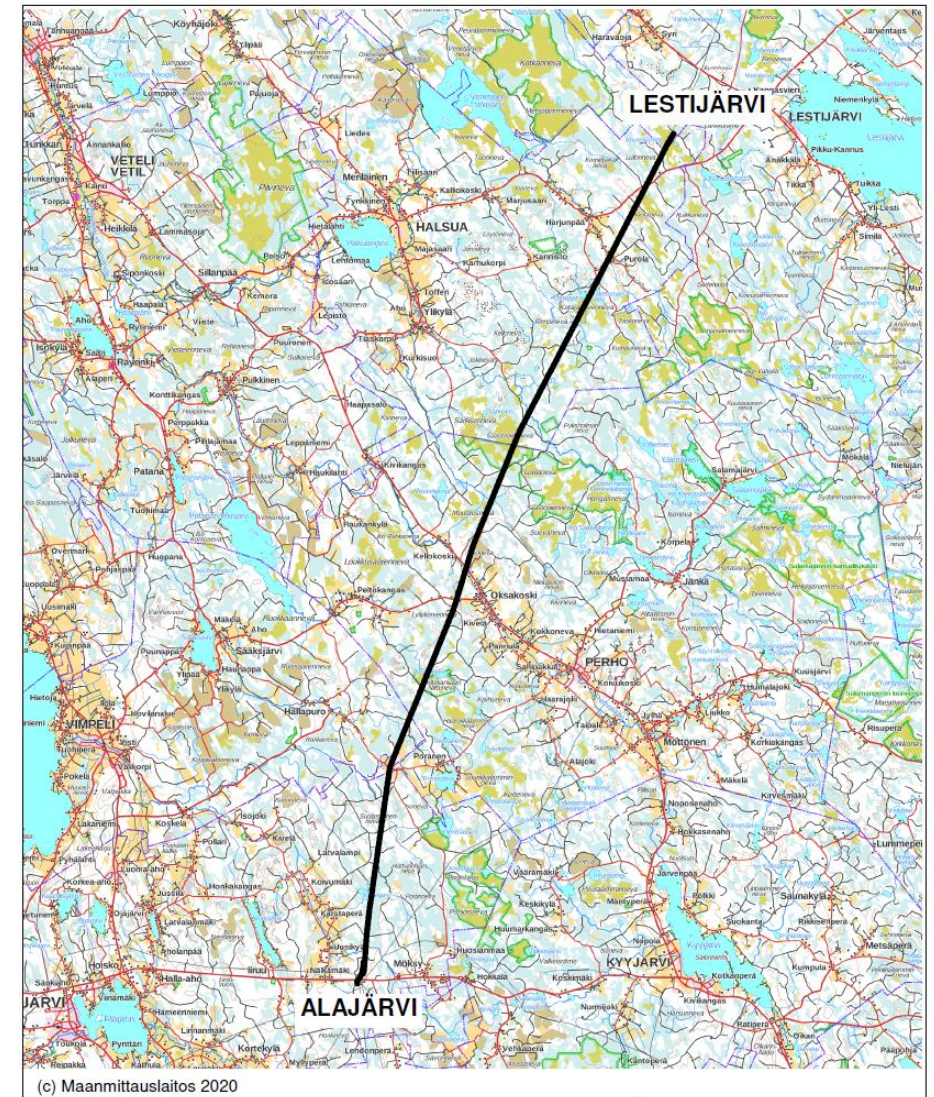
Positive local impacts

- Annual real estate tax revenue of 2,5 m€ will double current municipality tax income
- Positive employment effects and job possibilities
- Benefits to local construction companies, other subcontractors, accommodation services, restaurants etc.
- Improved road network will benefit road users
- Carbon footprint reduction, energy self-sufficiency improvement and possibility to achieve carbon neutrality



400 kV overhead line is unique

- 58 kilometers of new 400 kV overhead line will be built to connect the wind farm to Fingrid Alajärvi substation
- First wind project to construct a new 400 kV overhead line
- Significant infrastructure project in the region
- Enforces the backbone grid of the Finnish electricity system
- Serves additional future wind farms and other potential electricity producers in the region



Environmental impacts

- Lestijärvi wind farm will have significant environmental impacts
- Impacts thoroughly assessed in the EIAs
- Delicate natural values, cultural and other environmental restrictions have been identified and avoided
- Noise, flicker and landscape impacts have been modelled throughout the project and follow existing regulation
- OX2 will voluntarily plan and execute biodiversity actions in the wind farm site to preserve and enhance the local environment



What makes Lestijärvi wind farm unique?

- Covers 2 % of Finnish electricity production with renewable, subsidy-free electricity
- Exceptionally positive local feedback and support
- Massive impacts on local economy
- New 400 kV overhead line has significant regional and national impact

”The future of Lestijärvi is secured”

– Esko Ahonen, former Lestijärvi head of municipality

Thank you!

For more information about the project, check the following links:

1. Locally published resident magazine →

<https://kabinetti.kosila.fi/tuulipuisto202109/#/article/1/page/1>

2. Lestijärvi web page:

<https://www.ox2.com/projects/lestijarvi/>

