



JUMPSTARTER

Slo Wind

NEXT GENERATION OF THE GENERATORS

29/11/2022

MANLIO BOITO

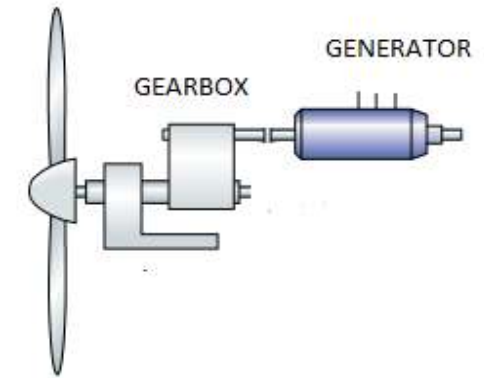
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Funded by the
European Union



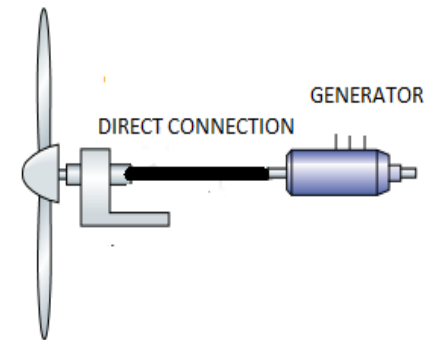
Problem

- ▶ No power production with wind below 3 m/ Sec
- ▶ Generators needs gear box
- ▶ Costs of gear box is 15 % of the total cost of wind plant
- ▶ Gear box requires more frequent maintenance and oil/greases



Solution

- ▶ Slow Wind produce electricity starting with wind speed of 3m/s
- ▶ Increased flexibility in the electricity production curve
- ▶ Simple solution – no gearbox needed
- ▶ No cost of maintenance for the gearbox



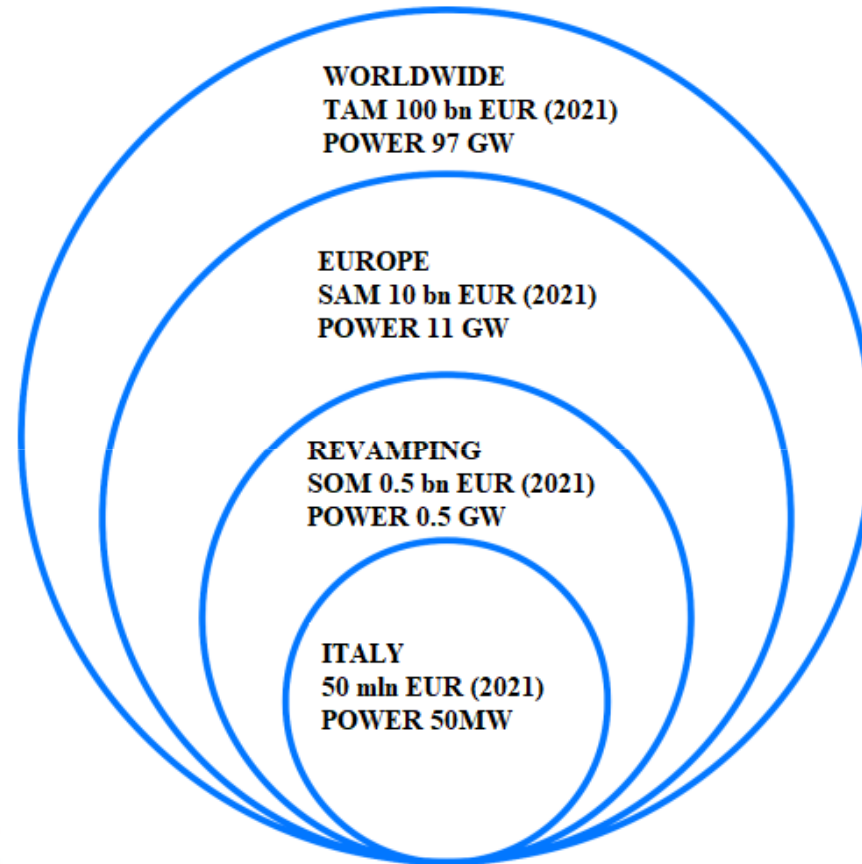
Market

Worldwide

- ▶ TAM 100bn EUR (2021)
- ▶ Power 97GW (2021)

EUROPE

- ▶ TAM 10bn EUR (2021)
- ▶ Power 11 GW (2021)



Competitive Advantage

- ▶ Production starting with low speed wind even 3 m/s instead of 4 -5 m/s
- ▶ Additional windy day = additional Revenue ~ + 10%
- ▶ No gearbox needed – **15 % cost saved** on wind plant construction
- ▶ Less downtime for standard maintenance – **1,5 days / year**
- ▶ Less material and lubricants – **10% material less** needed to have the same power

Business model

- ▶ Royalty (one off) based on every plant installed
- ▶ 0.05 EUR/W of Nominal Power Installed

Example:

Plant with installed power = 1 MW;

Actual Cost = 1mln EUR;

New Cost = 850K EUR

My Royalty = 50K EUR - one time

Savings: 100K EUR

Customers & Competition

- ▶ 16 worldwide companies producing generators



Finance

▶ Revenues – Royalty

▶ 5k EUR per small power plant (100KW)

25k EUR per medium power plant (500KW)

▶ Costs

Demo construction - 20k EUR

Patent Italy and PCT – 20k EUR

Lawyer for License Agreement – 18k EUR

Sales Budget – 10k EUR

Sales Person – 50k EUR to be hired

Finance / Marketing – 25k EUR outsourcing



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