



EnergyWeek
2019



FORUS

NATIONAL FISCAL BENEFITS OUT OF GRANTING INVESTMENT SUBSIDY ON SOLAR POWER

19.3.2019

AGENDA

- Forus
- More solar is needed
- Benefits of current investment subsidy

FORUS – PROFITABLY GREEN

MISSION

To stop the climate catastrophe

STRATEGY

Profitably to CO₂ zero with renewable energy, energy saving and afforestation



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PUBLIC REFERENCES



FINNISH SOLAR INVESTMENT SUBSIDY

SUBSIDY SCHEME

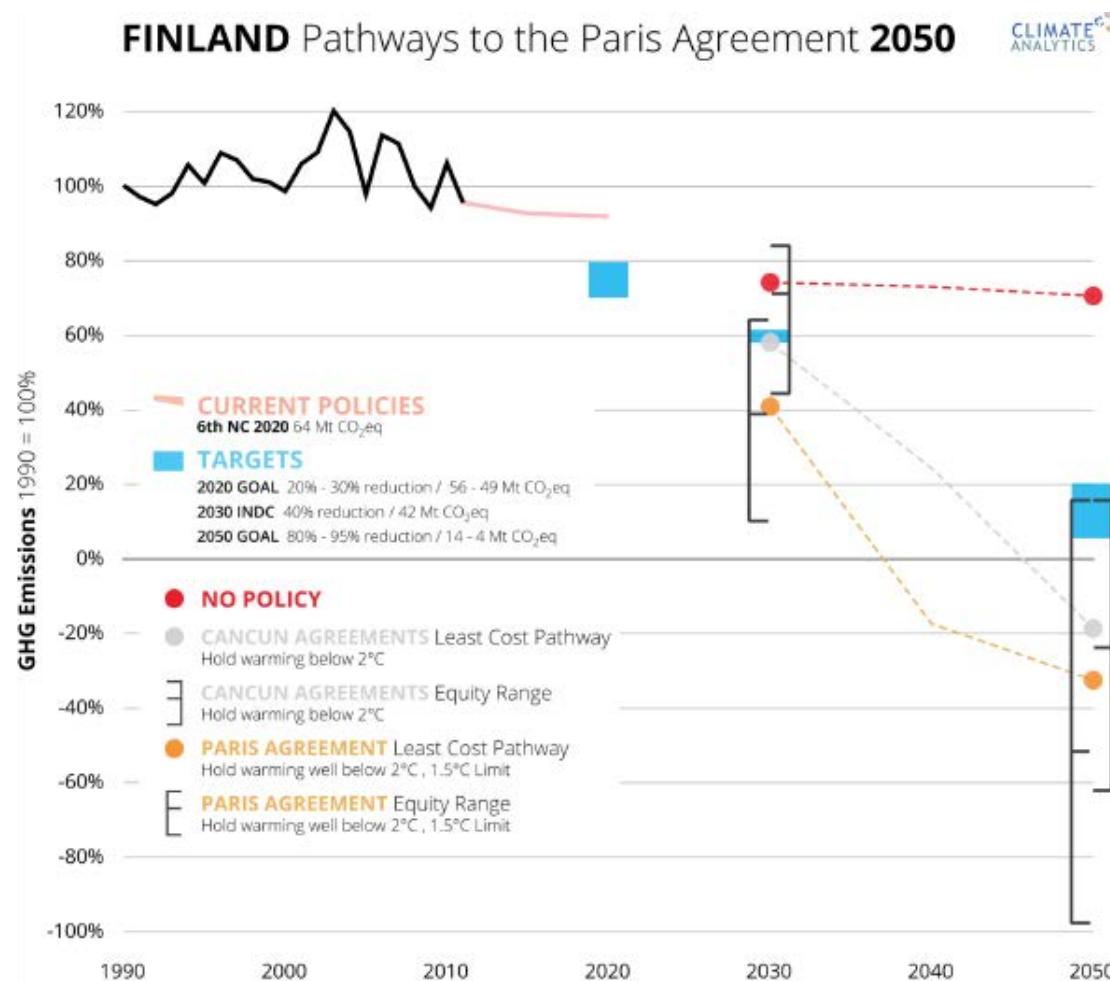
Year	Subsidy
2015	30%
2016 - 2018	25%
2019	25 % until 1.5. then 20%
2020	?

- **50% - 200%** more efficient way to support investment than tariff
- benefits investor

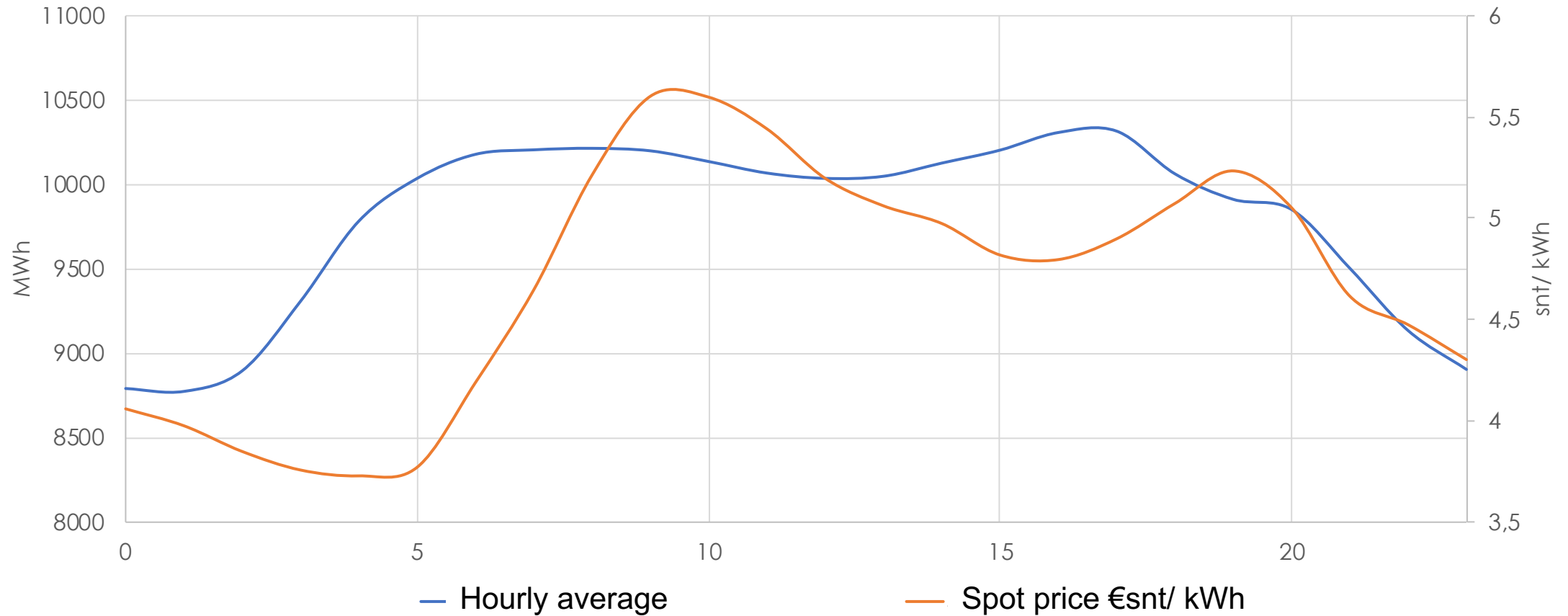
NEED FOR MORE SOLAR

EMISSIONS HAVE TO BE CUT

- All political parties wish to speed emission cuts
- Solar is significance also in Finland



FINNISH ELECTRICITY CONSUMPTION



HOW MUCH SOLAR IS NEEDED?

3 GW

Finnsolar

9 GW

Finland's electricity consumption could use 99,9% out of 9 MW power plant's output

30 GW

100% renewable scenario, solar in Finland by 2050*

BENEFITS OF INVESTMENT SUBSIDY

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Perspective: National fiscal benefits count irrespective who is beneficiary

Major points

- Optimizing solar investments
- Value of emission cuts
- Cutting down electricity imports

Additional benefits

- GDB increase without external effects
- Cutting costs of powerplants
- Employment benefit
- Increase in tax-revenue

Benefit

1/3 – Optimizing solar investments

	Own consumption	Solar hours	Powerplant price €/Wp	Panel lifetime
Residential solar	e.g. 70 %	e.g. 800	1,4*	Shortest, i.e 20 y
Commercial solar	e.g. 90 %	e.g. 900	0,8	i.e 30 y
Grid solar	100%	e.g. 1000	0,7	Longest i.e 40 y

1 M € investment creates	
Residential solar	10 GWh
Commercial solar	30 GWh
Grid solar	50 GWh

CONCLUSIONS

1. Subsidy directs investment to commercial solar
2. Even better would be to subsidize grid solar

*12 plants, less than 4 kW, Motiva

Benefit

2/3 – Value of CO₂ savings

250 000 € subsidy

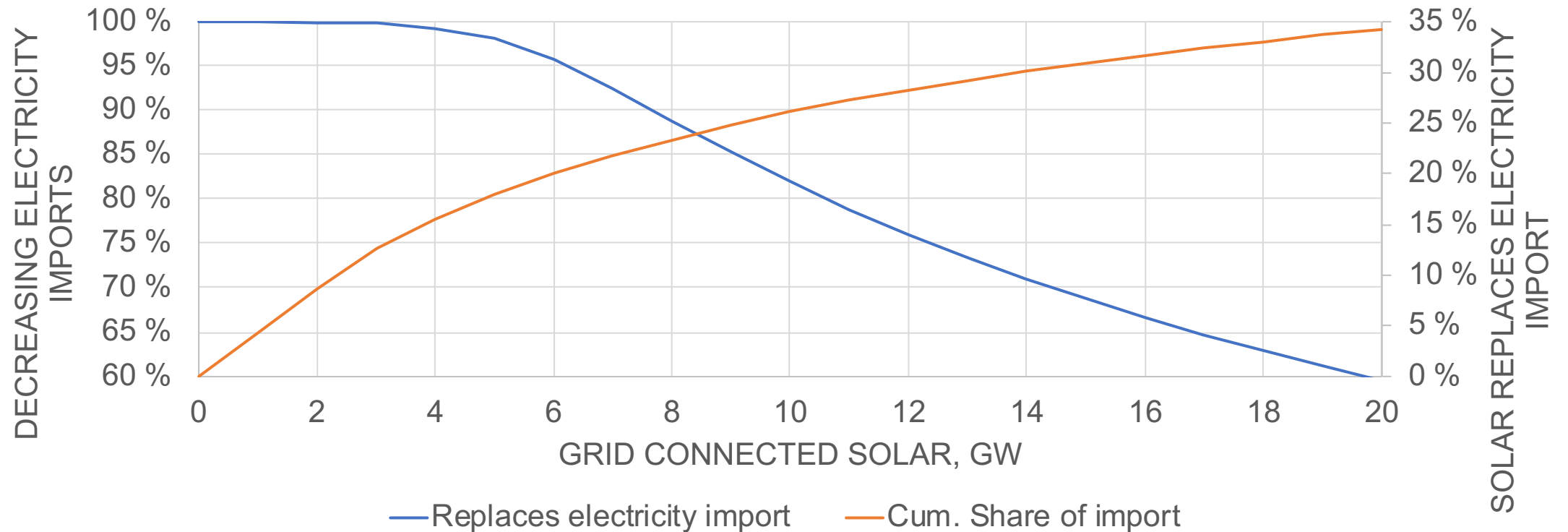
25 years perspective, commercial solar

Scenario	CO ₂ Price €/ton	Marginal CO ₂ reduction	Value CO ₂ savings over 25 year
Cheap	23	128,5 kg CO ₂ /MWh	70 000 €
Expensive	60	800 kg CO ₂ /MWh	1 300 000 €

Benefit

3/3 – Cutting electricity imports

SOLAR POWER POTENTIAL AFFECTING ELECTRICITY IMPORTS AND ELECTRICITY SHORTAGE



SUMMARY INVESTMENT SUBSIDY

1. Excellent and affordable incentive
2. Benefits government on multiple ways
3. Grid solar should get subsidy

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