

SODO

SISTEMSKI OPERATER
DISTRIBUCIJSKEGA OMREŽJA Z
ELEKTRIČNO ENERGIJO

ELES

HOPS

HHEP OPERATOR
DISTRIBUCIJSKOG
SUSTAVA d.o.o.



Project of Common Interest SINCRO.GRID

Smart Grid viewed from the regional cooperation perspective
Brussel, 28th November, 2017

Simon Tot, ELES

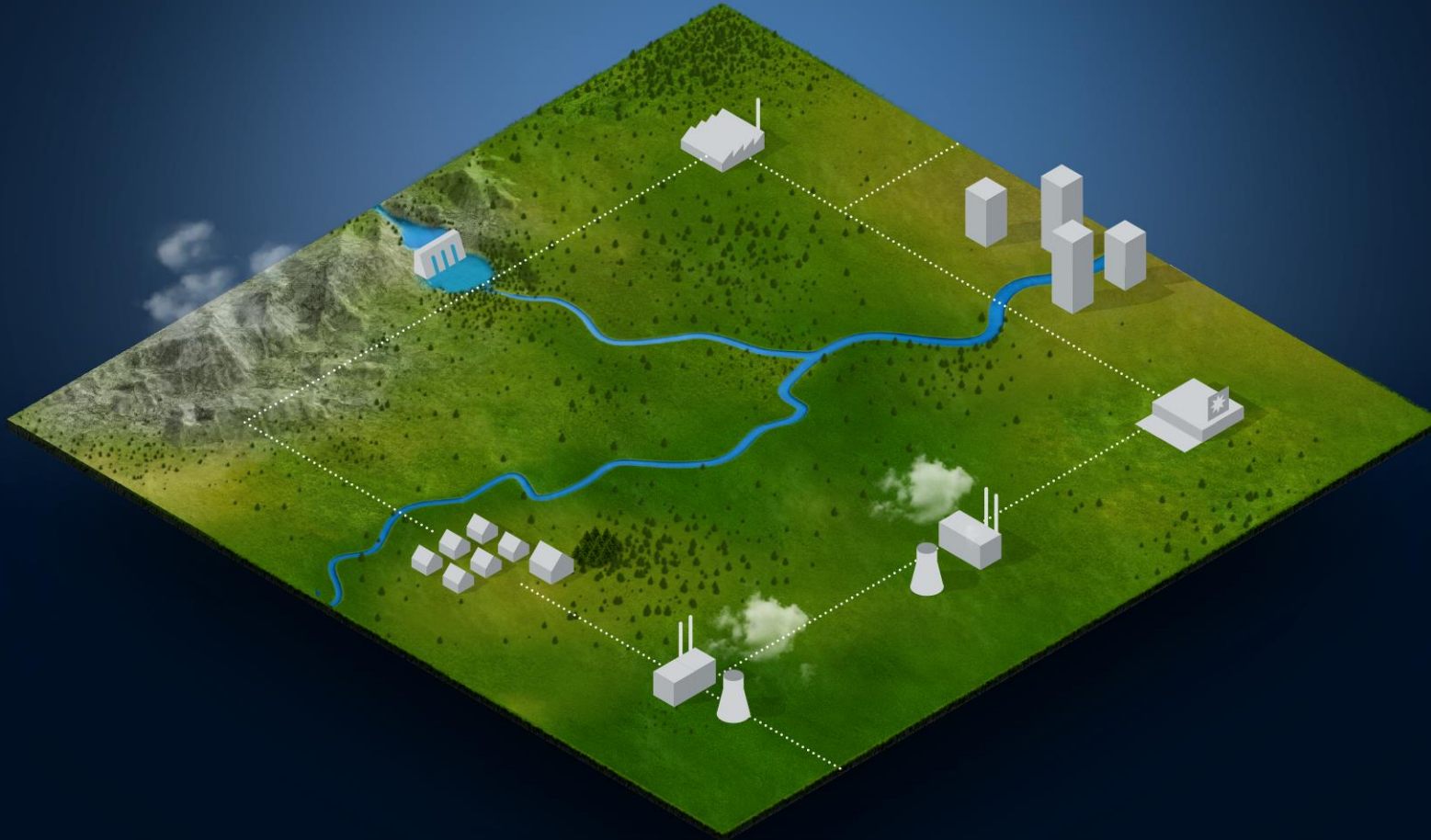
Mate Lasić, HOPS

SINCRO. GRID



Co-financed by the European Union
Connecting Europe Facility

Initial period - centralization



Production was separate from the consumers

The impact of renewable energy was small.

Fossil fuels were involved in a large proportion because there was no limitation on CO₂ emissions

Decentralization



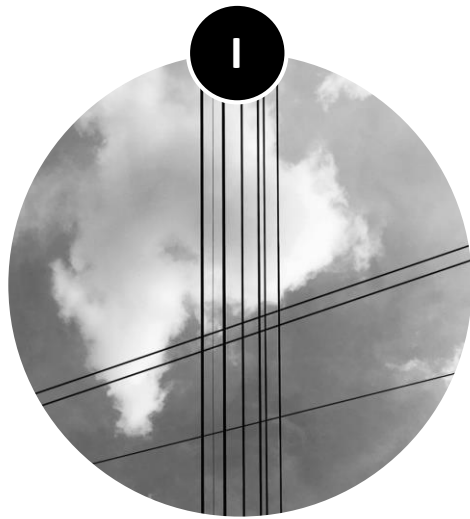
Renewable energy sources
increasing

Consumers of electricity
are becoming producers



Electromobility grows - may
acts as a producer or
consumer

Secure and reliable power supply is our main goal, so we need to eliminate some limits that arise with the "revolutionary transition"



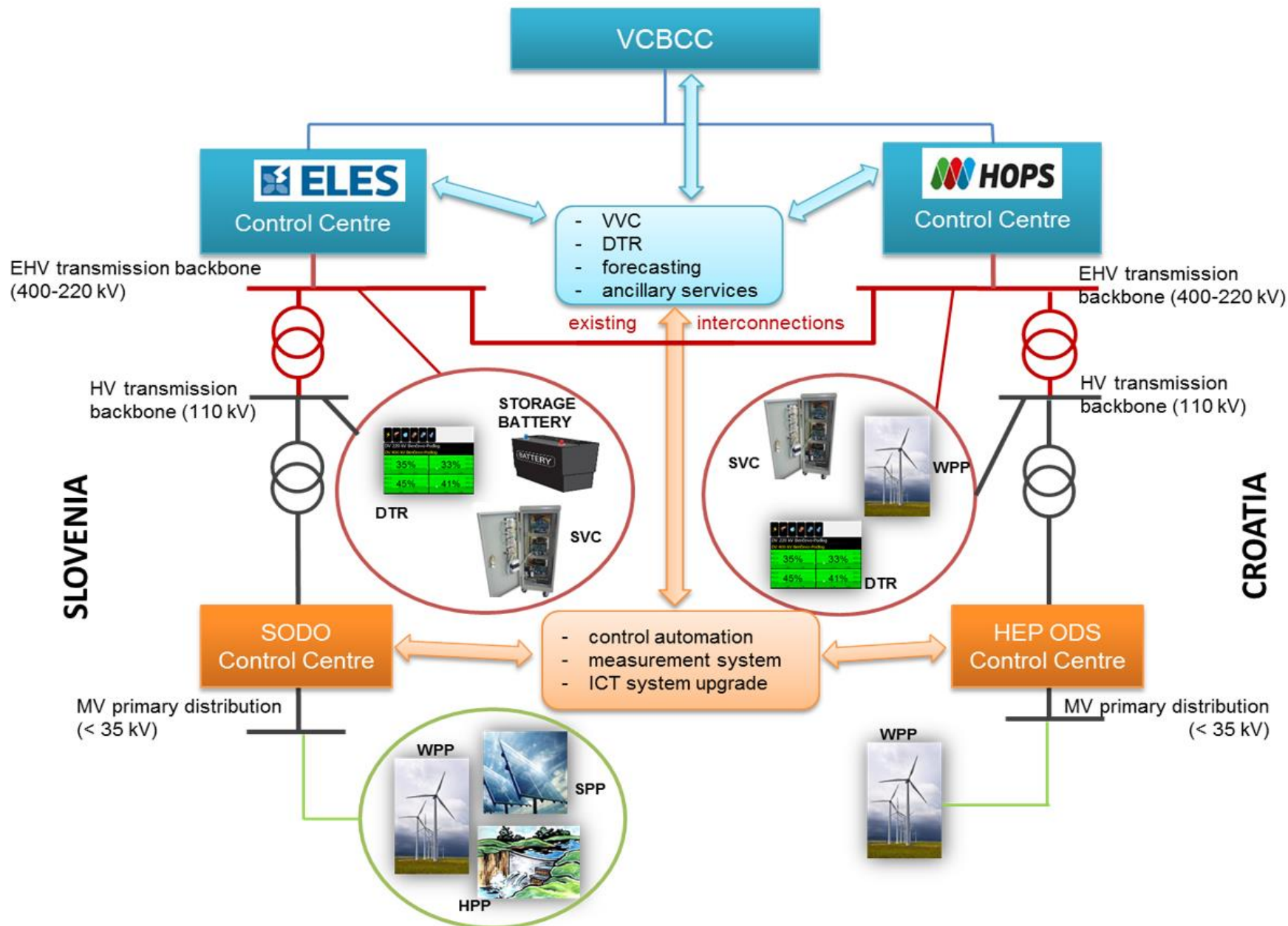
Flexibility of Reactive power



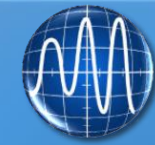
Flexibility of Active power



Dynamic thermal rating of power lines



Benefits of SINCRO.GRID



Solved issue of voltage profiles



Provide more ancillary services

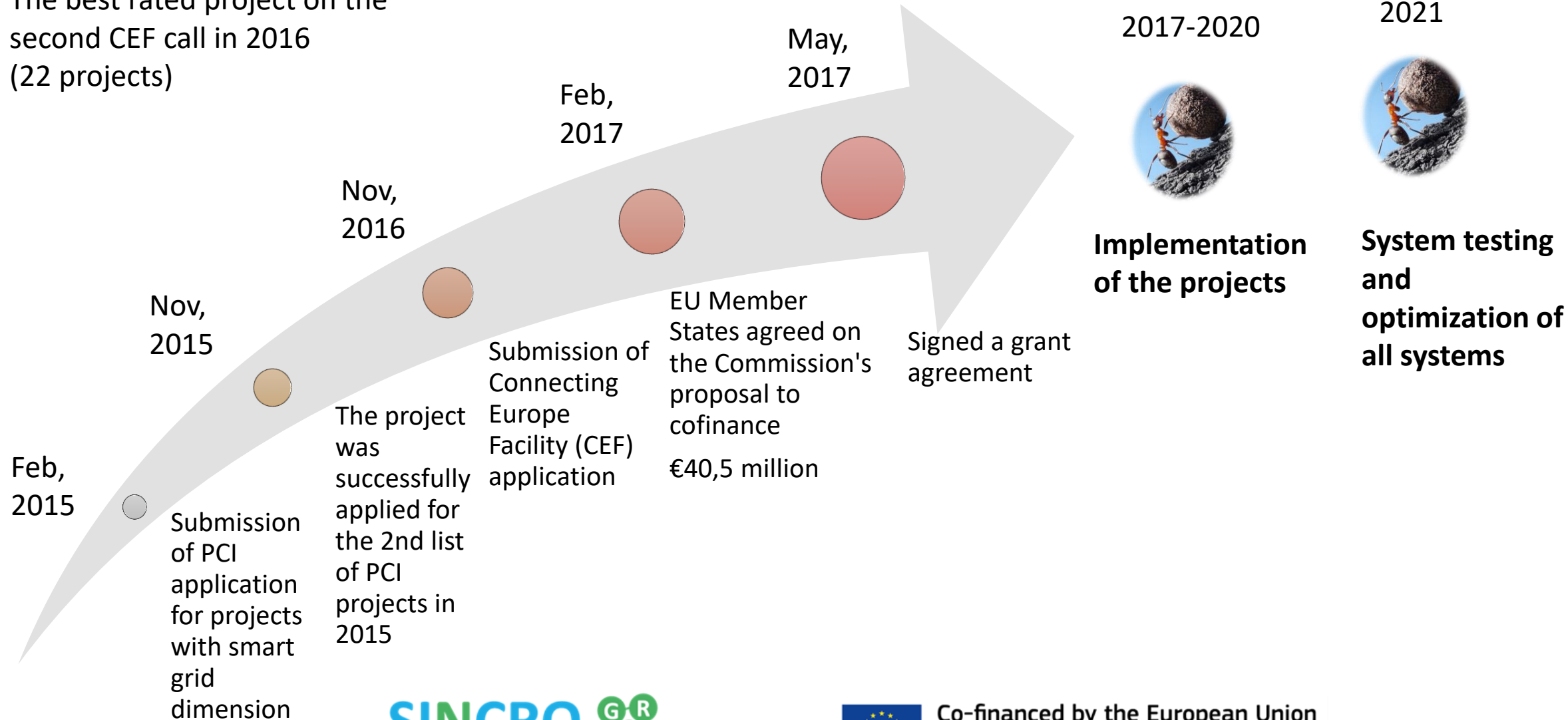


Increasing transmission lines capacities

Technological innovation with replication potential

Timeline and main steps of the SINCRO.GRID project

The best rated project on the second CEF call in 2016 (22 projects)



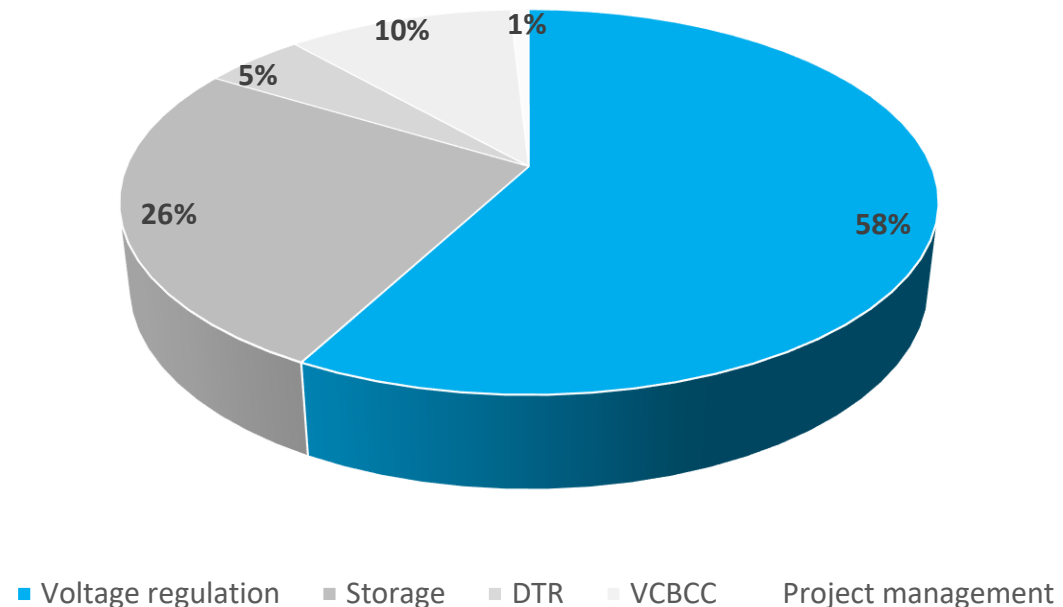
SINCRO.GRID cost overview

- Overall investment costs amount to 88,6 million Euros
- € 40,5 million of EU funding from the CEF (51%)

cost sharing of individual projects

Activity	Total investment costs /mio Eur
Compensation devices	51,2
BESS	22,9
DTR	4,2
VCBCC	9,4
Project management	0,8
Sum	88,6

Total investment costs





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Thank You for your attention

Disclaimer:

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