

A view to 2050 - The fully integrated, optimised and carbon neutral district

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CA-RES/CA EED/CA EPBD Joint Workshop

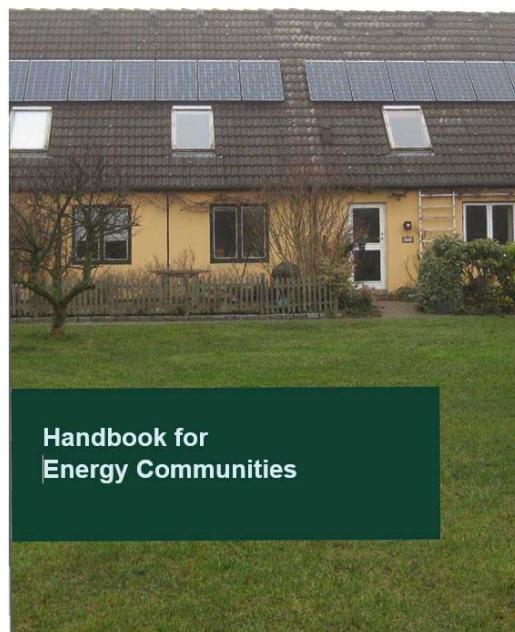
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“Plan for the future
— because that’s where you’re going to spend the rest of your life.”

“If you want to change the future,
you must change what you’re doing in the present.”

Mark Twain

2050 - Policy



2050 - Climate

2050 - Energy Supply

CO_2

2050 - Energy System



2050 - Energy System

Flexible energy system
Local investments - energy communities
Power-heat-cooling-storage = one platform

2050 - Energy Sources



2050 - Energy Sources

No fossil fuels - no biomass - no nuclear power

Hydro, solar and wind power

Power-to-X

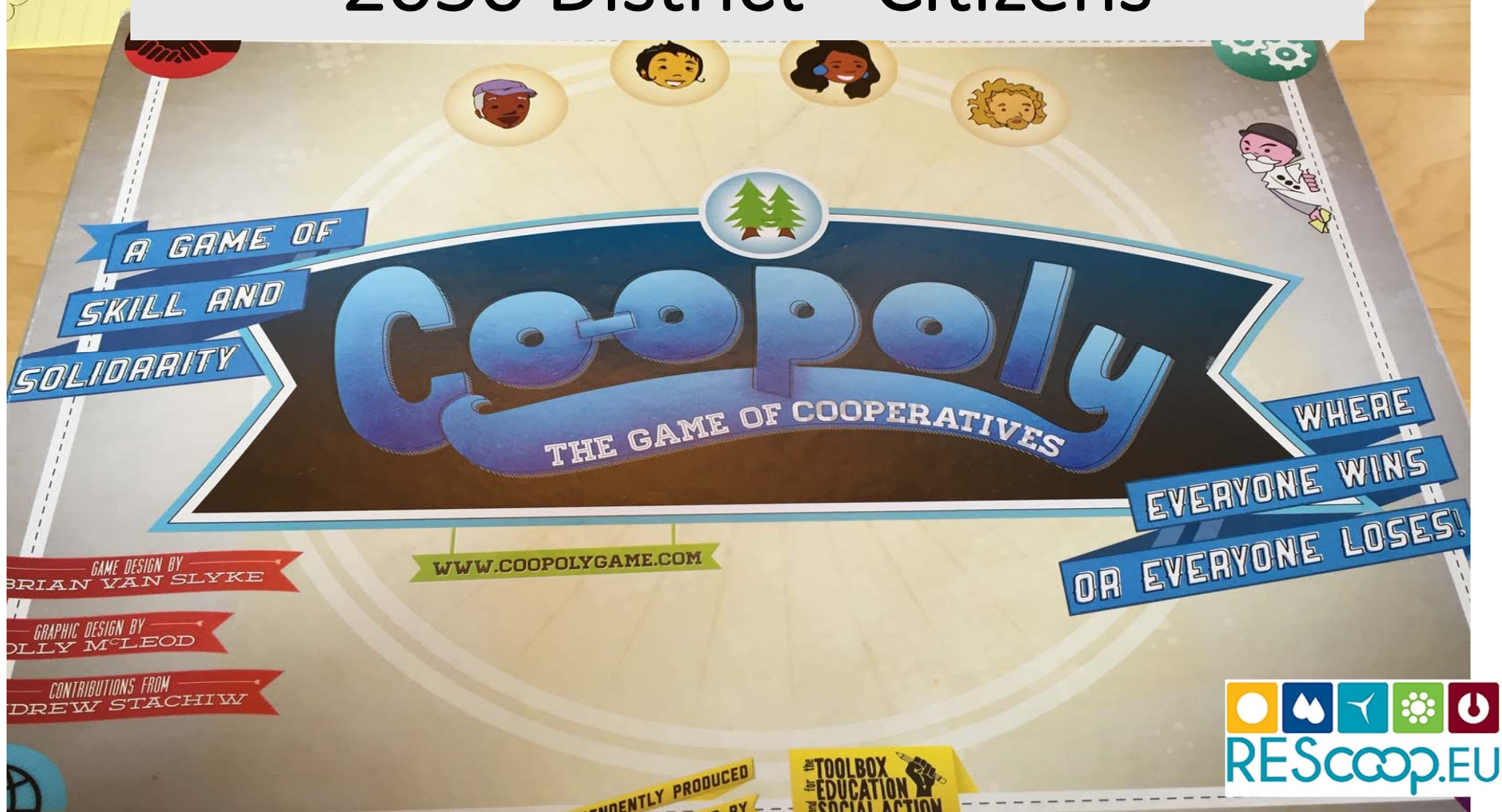
Geothermal technology

District heating - excess heat

Storage

CO₂ negative energy supply

2050 District - Citizens



2050 District - Citizens

Citizens organized in energy communities
From ownership to co-ownership
From consumer to prosumer
Community con-/prosumers
Community investments in local energy topics

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WHERE
EVERYONE WINS
OR EVERYONE LOSES!



THE TOOLBOX
for
EDUCATION
and
SOCIAL ACTION

2050 District - Urban Era

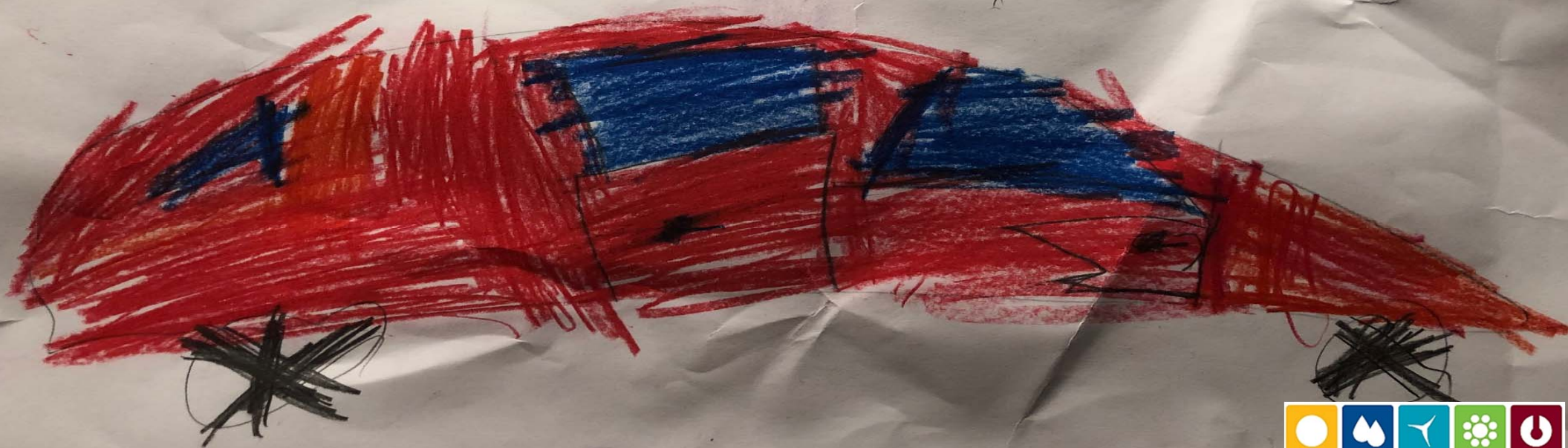


2050 District - Urban Era

Energy self-sufficient buildings - new and retrofitted
Intelligent materials and components (standards)
Intelligent light and windows
Excess energy is sold and re-used/no energy loss
Smart exchange of energy in the community
Energy communities as energy pioneers/controllers
Urban farming - citizen farmer
Pedestrianized city centres



2050 District - Transport



2050 District - Transport

Vehicle-sharing in the energy community

Vehicles, ferries and aircrafts have intelligent and wireless charging

Citizens design their journey and needs are in focus

My vehicle is my gadget

2050 District - Local Community



2050 District - Local Community

Digital community platform (real time data)

Real time data = short planning time

Exchange of community data - Trust!

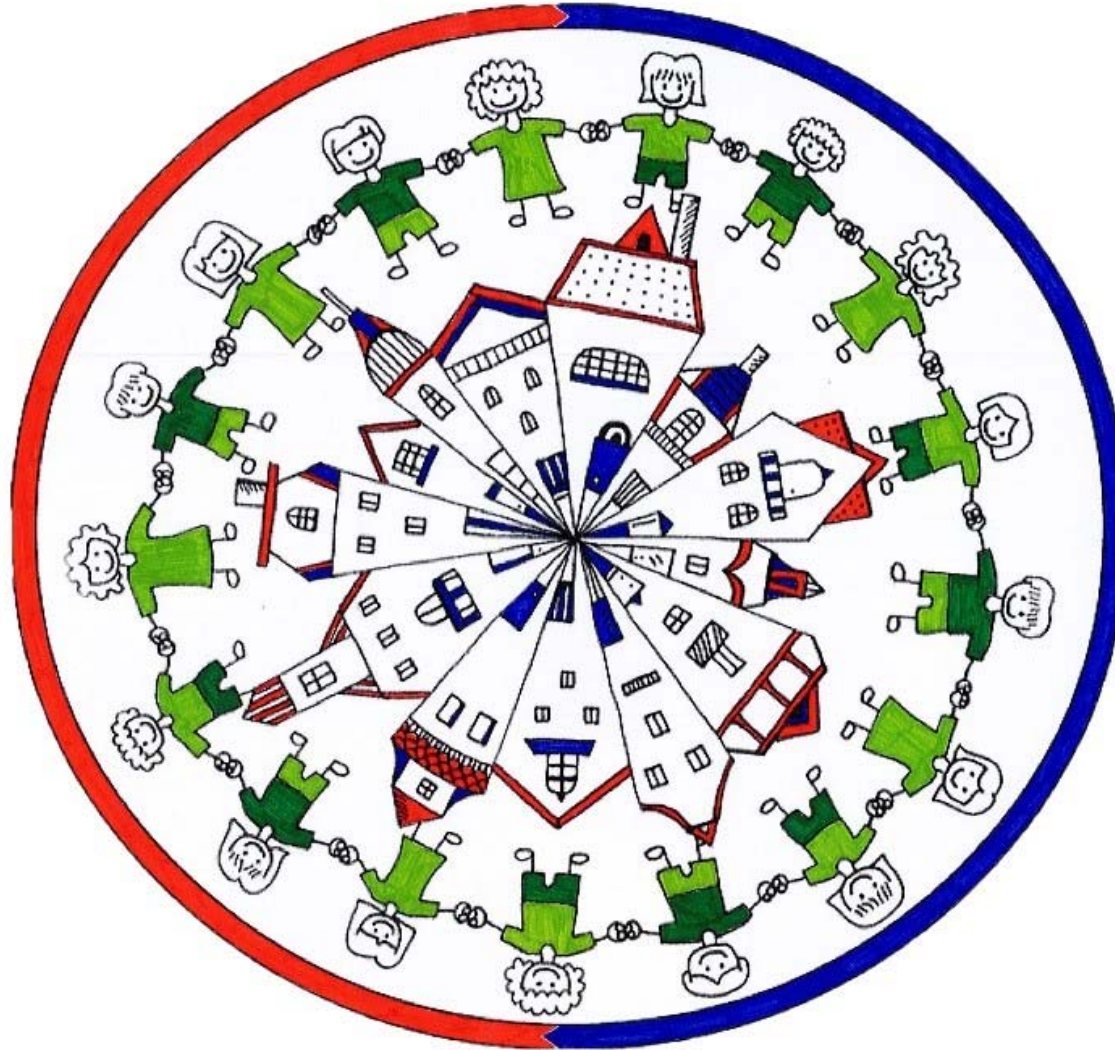
Local data develops the community

Data use for the benefit of the community

“How-to-energy-optimize” files

Local investments (coordination and priority)

2050 District - Local Community



2050 District - Local Community

Communities are living in real time

Energy data collection creates tools to design sustainable energy communities

“How-to-create-common-energy-approaches”

Social innovation is integrated in local energy related decisions

Data interpretation predicts the future energy system for citizens!

The fully integrated, optimised and carbon neutral district is a reality!

Go for 2050

Get started!

Thanks

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