Taskforce on Energy Communities

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Taskforce on Energy Communities

- Crosscutting work in the framework of Bridge
- What happens in the different MSs?
  - Good and inspiring examples
  - Analysis on legal existing and upcoming framework
- Recommendations expected
  - Replicability and upscaling needs and potentials
  - Research and demonstration needs

- Working Group “Regional Matters” with Taskforce “Local Energy Communities”
- Knowledge Generation from and for JPP SES projects
- Spotlights and Policy Briefs
  - for academia
  - funding programs
  - legislation (on MS level)
  - practitioners (energy, ICT)

Topics (identified by core-team of taskforce)

1. What are Energy Communities?
2. Which potential for renewable energy use can be triggered by a CEC or REC in addition to existing organisations?
3. What would be benefits and options for a CEC to operate its own (sub) grid?
4. What are benefits of CEC or REC in relation to existing means and measures of citizen involvement?
5. Which overall cost savings can be expected from CECs compared to existing schemes?
6. What are feasible tariffs to allow for the implementation of a CEC as part of the overall energy system?
7. How can candidates be supported to establish a CEC or REC?
8. What are requirements to ICT solutions for the implementation of a CEC or REC?
9. How can data collection and management be limited and data security be ensured in a CEC or
10. What is the national situation of Energy Communities in the context of the CEP?

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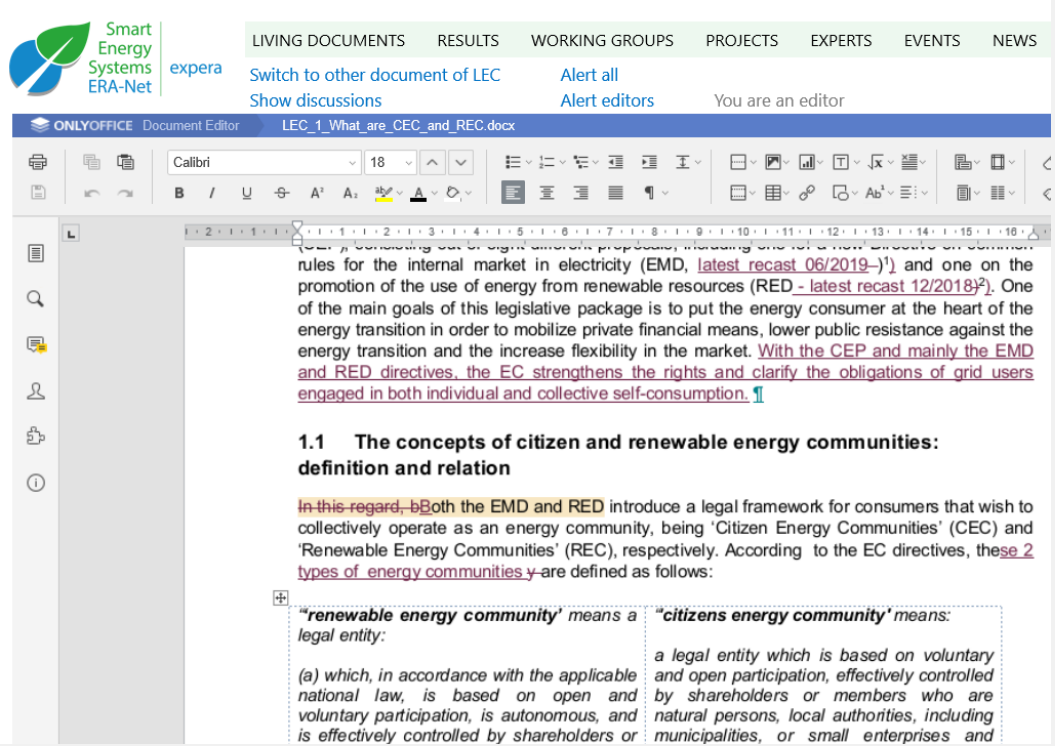
11. Cases and Experiences
12. Conclusions and Recommendations

Participation!



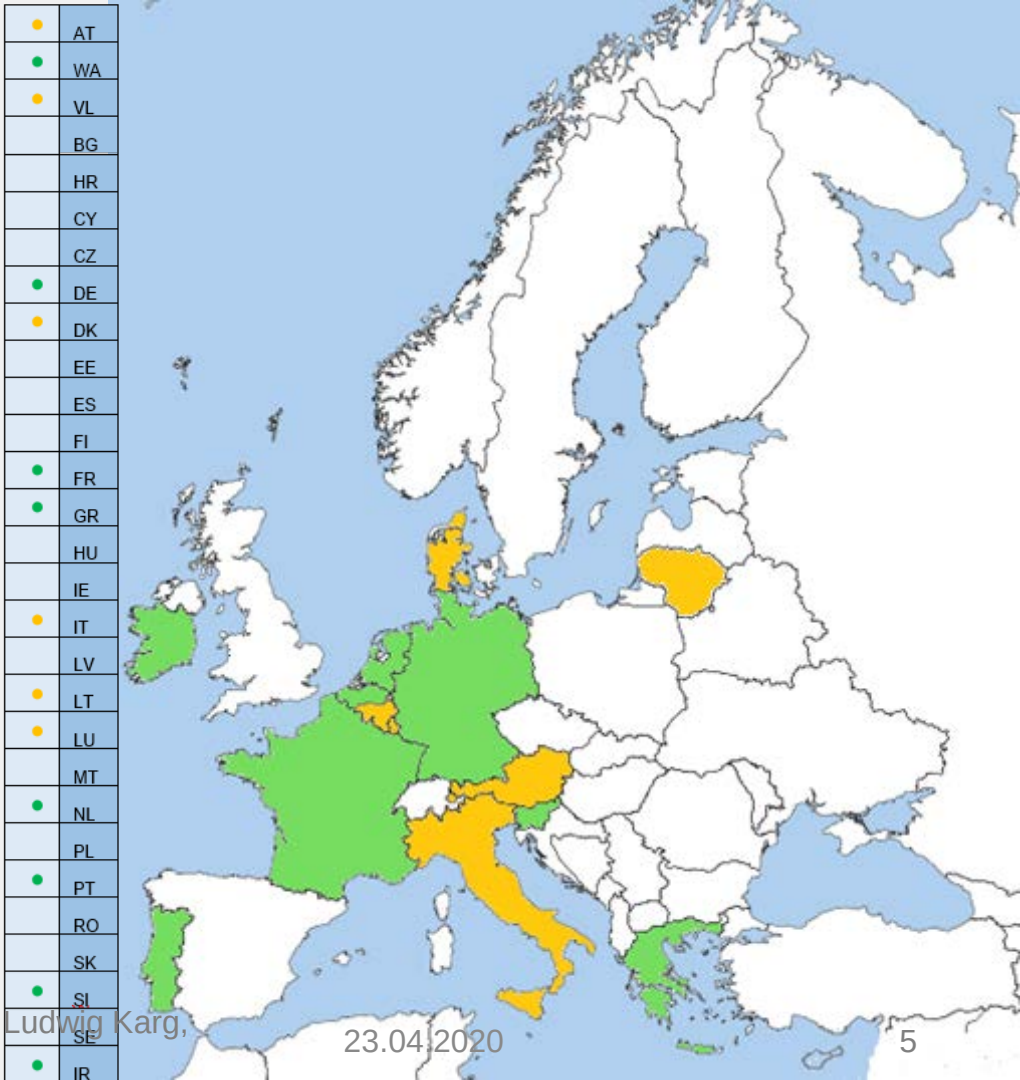
- cooperating with experts at www.smartgridsplus.eu
- reading and commenting Living Documents
- taking part in online discussions

Countries Investigated for Intermediate Report

- Intermediate results

  - countries with existing framework
  - countries with emerging framework
  - countries implementing RECs / CECs

- Outlook
  - expand target group: government officials, regulators
  - new methodology: semi-structured interviews



Active support for CEC/REC

- clear legal framework
- financial support for setup
- financial support for operating
- capacity building for key actors
- capacity in terms of time
- counselling with models / templates
- network for knowledge exchange
- umbrella to reduce risks, costs etc.
- electrical technology
- software for operating the community
- clear positioning of DSO / TSO

No	Name	
class 1	Collective generation and trading of electricity	al on Pla
class 2	Generation-Consumption Communities	cert - not
class 3	Collective residential self-consumption	gener ings; in
class 4	Energy positive districts	districts systems
class 5	Energy islands	real island standalone gyNet)
class 6	Municipal utilities[2]	existing orga citizens' contr controlled by
class 7	Financial aggregation and investment	a "community" ment in generat
class 8	Cooperative Financing of Energy Efficiency	citizens jointly inv bly in their own re
class 9	Collective service providers	all types of commer charging stations, ag
Class 10	Digital energy supply and demand response systems	all types of digitally co chain), these days pos

ms (e.g. implemented with block- ndbox-model	services (e.g. grouping of EV e management services)	MEs and municipalities, possi- crowd-funding	unt of or manage the invest- vement in organisation etc.)	and grid operation under rative) or indirectly (e.g. if	be operated model as in PowerTech-	their energy supply	with multiple dwell-	s and consumers energy markets	al Power whether active	Support Needs – assessed for …	The Netherlands
1	1	0	1[3]	1[1]	5	1	1[1]	5	5	clear legal framework	
1	1	1	1[4]	0	1	3[2]	1	0	0	financial support for setup	
0	1	0	2[5]	0	0	0	0	0	0	financial support for operating	
1	1	1	3[6]	1	1	1	1	2	0	capacity building for key actors	
0	1	0	0	1	1	1	1	1	1	capacity in terms of time	
1	1	2	1	1	1	1	1	2	0	counselling with models / templates	
1	1	1	1	1	1	1	1	3	3	network for knowledge exchange	
1	1	1	3	1	1	1	1	1	3	umbrella to reduce risks, costs etc.	
1	1	0	0	1	3	3	3	3	0	electrical technology	
2	3	0	0	2	3	3	3	3	2	software for operating the community	
2	3	0	0	2	3	3	1	1	2	clear positioning of DSO / TSO	

Recommendations

1. Draw on the experiences of existing energy community initiatives, or create a temporary space for them to emerge in
2. Dare to be ambitious to maximize the potential of energy communities, but adequately differentiate between types
3. Specify principles of 'autonomy', 'effective control' in order to avoid elite-capture
4. Define the concept of 'locality' for collective self-consumption and energy sharing in line with grid topology, but do not equate it with the element of 'proximity' for REC
5. Put in place participation mechanisms for energy poor and vulnerable households
6. Consider the value that CEC and REC can provide to the public network
7. Consider the value of REC and CEC to the community
8. Pro-actively support the set-up of REC and CEC
9. Consider a separate auction-based support scheme for REC
10. Streamline, simplify and make less burdensome licensing and network connection procedures
11. Do not reduce the concept of CEC and REC to mere collective self-consumption and vice versa

Classes of Energy Communities

No	Name	LEC Taskforce
class 1	Collective generation and trading of electricity	all types of territorial or commercial groupings of generators – whether active on the market or under feed-in mechanisms (often called Virtual Power Plants)
class 2	Generation-Consumption Communities	certified sourcing of electricity in a closed group of generators and consumers - not necessarily in proximity but including local or regional energy markets
class 3	Collective residential & industrial self-consumption	generation, storage and consumption in residential cases with multiple dwellings; includes Tenant-Power (Mieterstrom) - models
class 4	Energy positive districts	districts with residential and business entities operating their energy supply systems under their own regime
class 5	Energy islands	real islands or parts of the distribution system that can be operated standalone (e.g. cellular system as in SINTEG, holonic model as in PolyEnergyNet)
class 6	Municipal utilities	existing organizations for energy production, supply and grid operation under citizens' control – directly (e.g. cooperative) or indirectly (e.g. controlled by local government)
class 7	Financial aggregation and investment	a "community" of investors joins to scale the amount of or manage the investment in generation systems (without further involvement in organisation etc.)
class 8	Cooperative Financing of Energy Efficiency	citizens jointly investing in efficiency means of SMEs and municipalities, possibly in their own region (e.g. contracting / ESCO, crowd-funding
class 9	Collective service providers	all types of commercial groupings of energy services (e.g. grouping of EV charging stations, aggregation of demand side management services)
Class 10	Digital supply and demand response systems	all types of digitally controlled energy systems (e.g. implemented with blockchain), these days possibly operated as a sandbox-model

Join us!

- at 1 pm for „10 flavours of energy communities“
- on expera for the co-creation of knowledge

  >>> https://t1p.de/usr9

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