Network Costs and Tariffs

Milka Mumović

Recovery of network costs - remuneration

Upfront payment - Costs of connection

Regular (monthly) payments – Costs of use of network

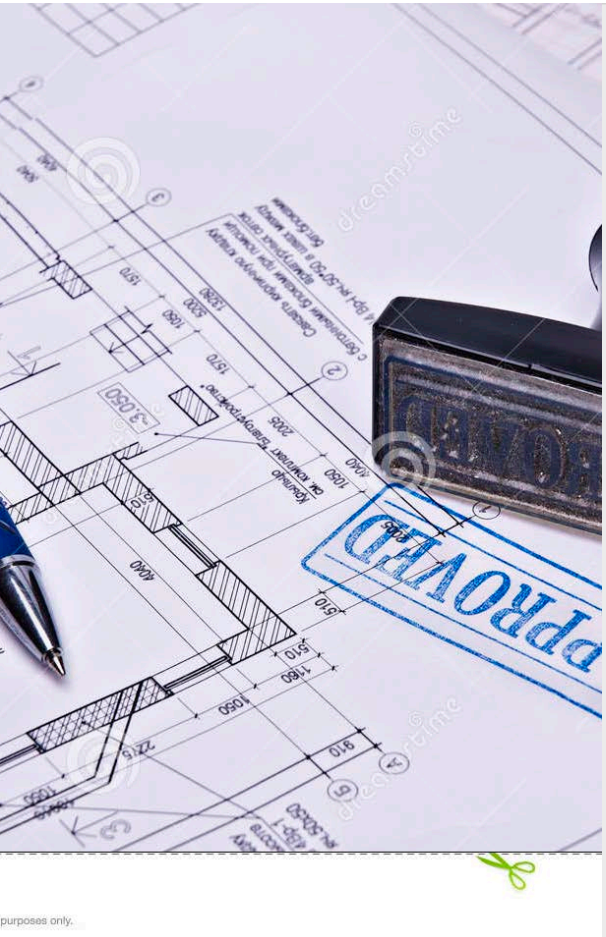
Fair costs allocation

Grid tariff structure: (Post in the ECDSO-E forum)

New elements: innovative services

- demand response,
- embedded generation,
- flexibility,
- storage…

COSTS OF CONNECTION – ALLOCATION PROBLEM



(ECDSO-E document)

Initiated by public bodies / individual users

RISKS:

- ☑ Planning
- ☑ Design
- ☑ Usage: duration and volume
- ☑ Customer's creditworthiness (No discrimination / social cohesion)

- shifting a fair share of the associated risks of an investment on the customers

1. Task one: analyse practices / best practice

Tariff design

Re: Network tariffs, EURELECTRIC 2016

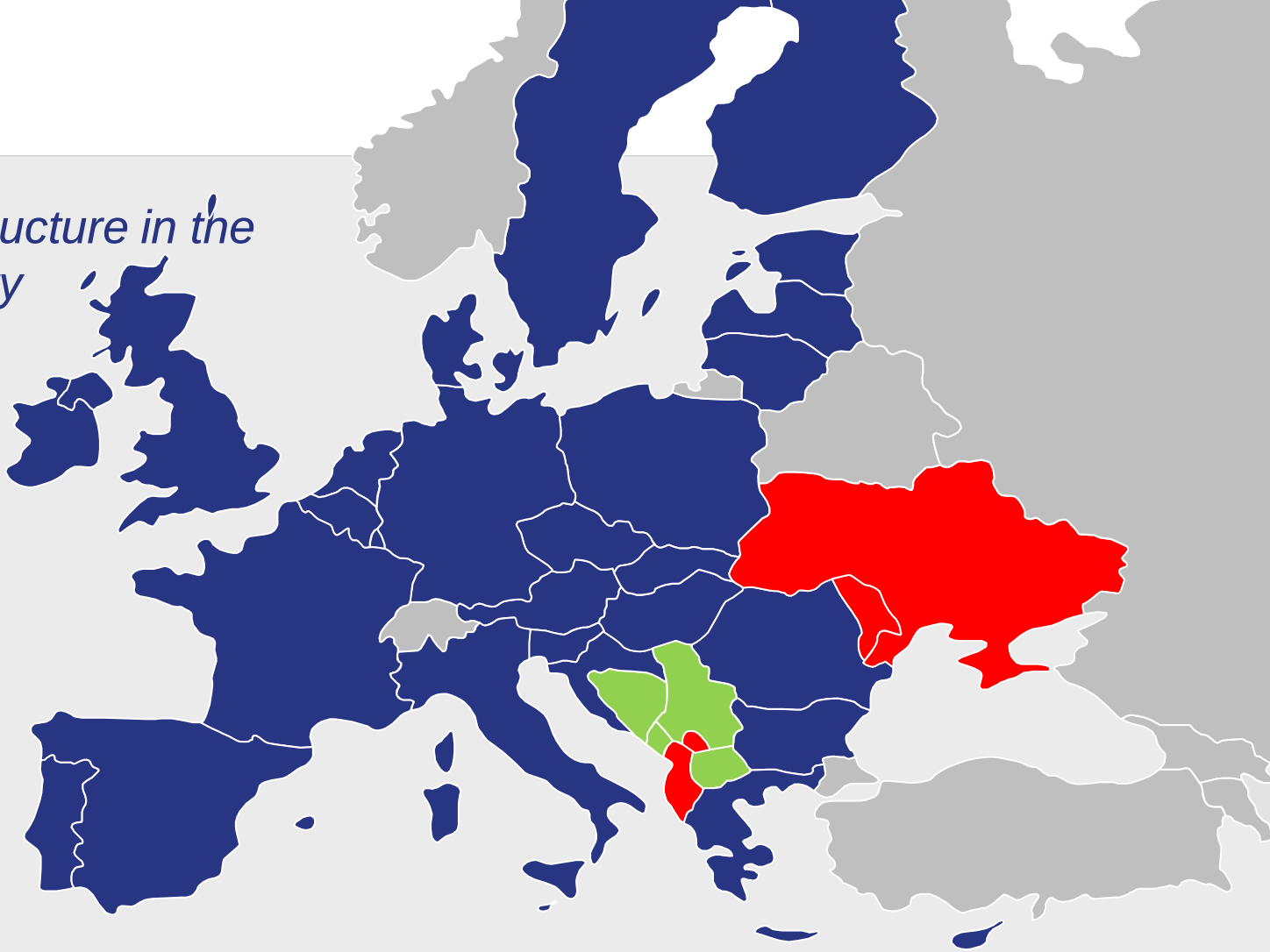
- ***Full and timely recovery of network costs (OPEX, depreciation and a fair return on investment***
- ***The structure of the distribution network tariffs, and in particular the balance between the capacity (€/kW) and the volumetric (€/kWh) tariff components,***
- ***Efficient and fair allocation of costs among different customer categories, avoiding cross-subsidisation between customer classes***
- ***Instruments to incentivise energy efficiency and demand response***

Structure of network tariff

Network tariff	Upfront connection charge	single - volume tariff	Dual tariff (load and volume)	Average ratio volume – load
Albania	x	X		100/ 0
Bosnia and Herzegovina	x		x	40 /60
Kosovo*	x	x		100 /0
FYR of Macedonia	x		x	30 /70
Moldova	x	x		100 / 0
Montenegro	X		x	30 /70
Serbia	x		x	40/60
Ukraine	x	x		100/ 0

2. Update this list.
Compare and evaluate!

Network tariffs structure in the Energy community

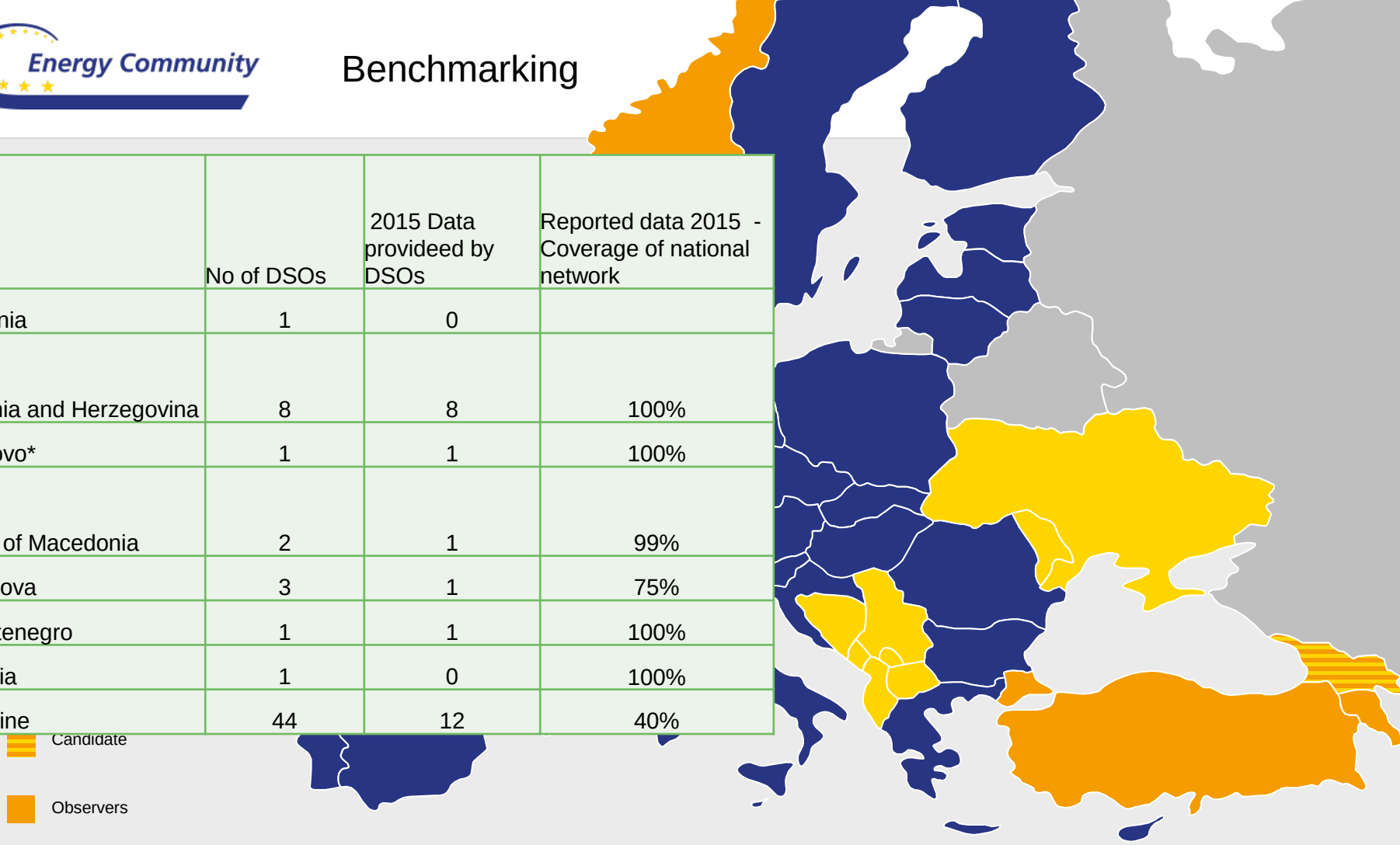


Benchmarking:

Distribution Business - Basic Figures, Structure & Ownership

Benchmarking

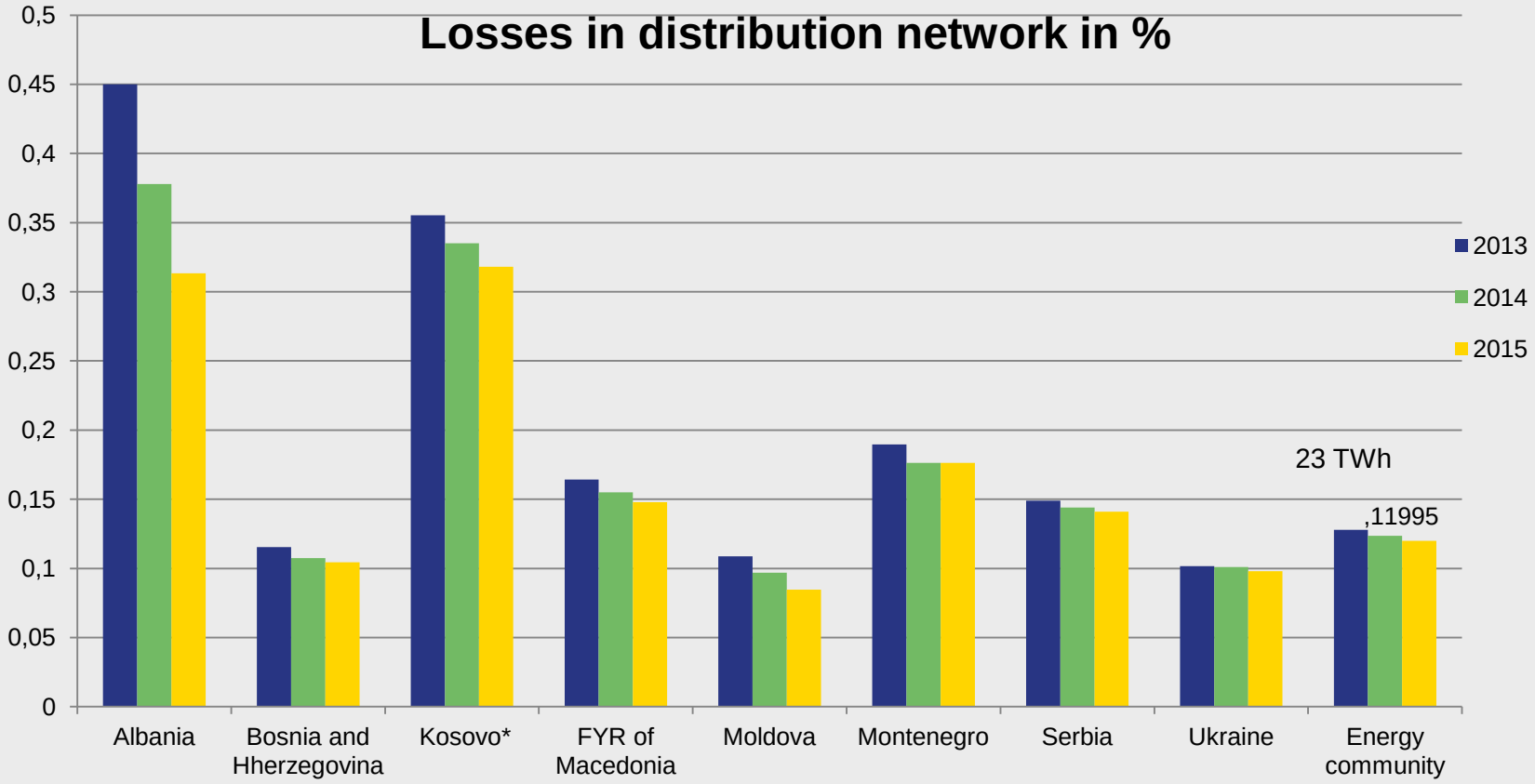
	No of DSOs	2015 Data provideed by DSOs	Reported data 2015 - Coverage of national network
Albania	1	0	
Bosnia and Herzegovina	8	8	100%
Kosovo*	1	1	100%
FYR of Macedonia	2	1	99%
Moldova	3	1	75%
Montenegro	1	1	100%
Serbia	1	0	100%
Ukraine	44	12	40%



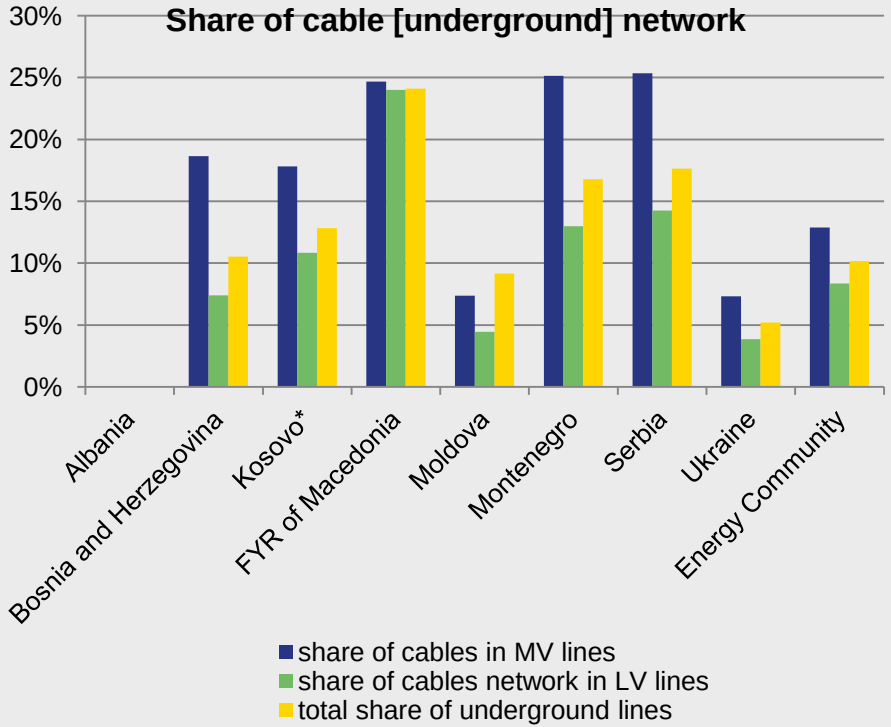
Key features of the network

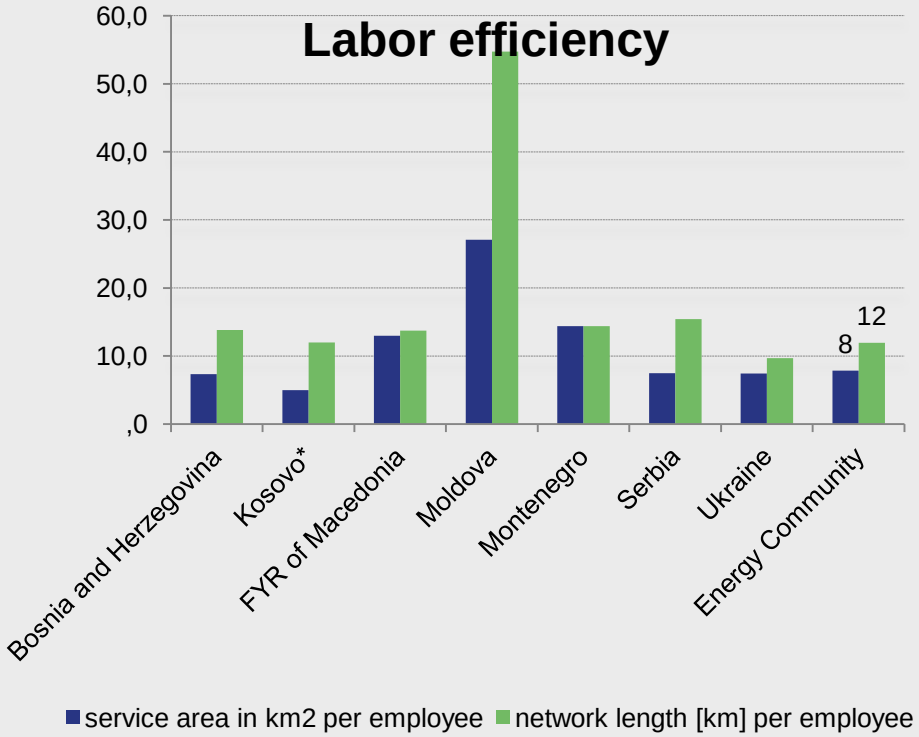
	share of cable (underground) network			network density		consumption structure		labor efficiency		
	share of cables in MV lines	share of cables network in LV lines	total share of underground lines	density [no of customers /km^2]	density [network length in m / connected customer]	number of LV customers in total connected to DN	average consumption in MWh / customer	service area in km^2 per employee	network length [km] per employee	number of customers per employee
Albania	n/a									
Bosnia and Herzegovina	19%	7%	11%	29	65	0,999	8	7	14	211
Kosovo*	18%	11%	13%	47	51	0,999	9	5	12	236
FYR of Macedonia	25%	24%	24%	27	39	0,999	9	13	14	352
Moldova	7%	4%	9%	50	40	0,995	3	27	55	1361
Montenegro	25%	13%	17%	19	52	0,999	7	14	14	279
Serbia	25%	14%	18%	47	44	0,999	8	7	15	349
Ukraine	7%	4%	5%	24	55	0,996	5	7	10	176
Energy Community	**0,129**	**0,084**	**0,102**	**30**	**51**	**1**	**7**	**8**	**12**	**232**

Losses (all DSOs)



Features - Cost drivers?





Task 3: To identify and compare cost drivers per service area

Action points

1. ***Allocation problem - upfront payment: analyse practices / best practice***
2. ***Network structure - Update the list, Compare and evaluate***
3. ***Cost drivers: identify and compare***

..... other ?

Thank you
for your attention!

www.energy-community.org