

## An updated SWOT analysis of the solar energy and best practices to enhance the solar energy uptake in Solarise 2Seas countries Emilia Motoasca (KU Leuven), Ahmed Rachid (UPJV), Victor Becerra (UoP)



## 2 Seas Solar Legislation/regulations

#### Barriers for solar energy uptake

Uncertainty of incentive schemes Investment companies, citizen not sure whether it is worth to invest in solar

**Environmental planning** 

Specific regulations for rooftop PV systems - eg historic buildings, monuments Environmental issues for solar farms – preservation of biodiversity, agriculture

Lack of integrated climate policy

Eg responsibilities are split amongst different federal, regional and local authorities in Belgium

## Guidelines for benchmarking and pilots Database with pilots, good practices and benchmarks

- To make stakeholders aware of available/existent knowledge/knowhow/innovations
- To allow synergies among various stakeholders with various backgrounds
- To bring more/other best practices examples close to 'your door'

## 2Seas Solar energy market

#### STRENGTH

- Low(er) prices components
- Reliable products (warranties)

#### **OPPORTUNITIES**

 Innovations to be exploited: floating PV, Agrivoltaics, PV/T, ....

#### WEAKNESSES

- (Almost) No local production modules
- Expensive monitoring/control solutions

#### **THREATS**

- Dependence on (PV-panels) imports
- Missing strategy to develop market more steadily

## 2Seas Solar cost/investment models

#### Elements for successful renewable energy support schemes

- a clear, bankable pricing system
- priority access to grid: clear identification of responsible for connection and incentivized
- clear, simple administrative and planning permission procedures.
- public acceptance/support.



Residential buildings (social housing)



**Historical buildings** (monuments or not)

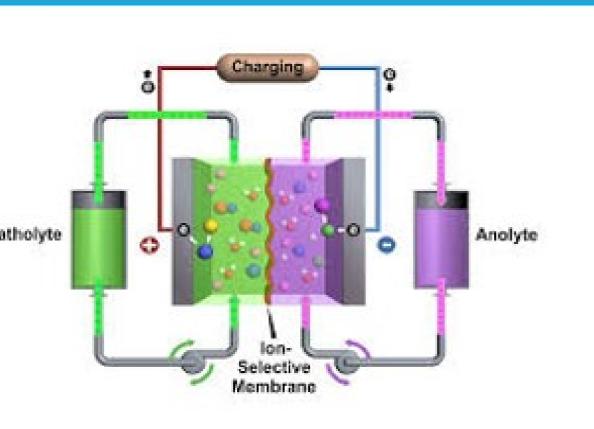


**Public buildings** (schools, city-halls)



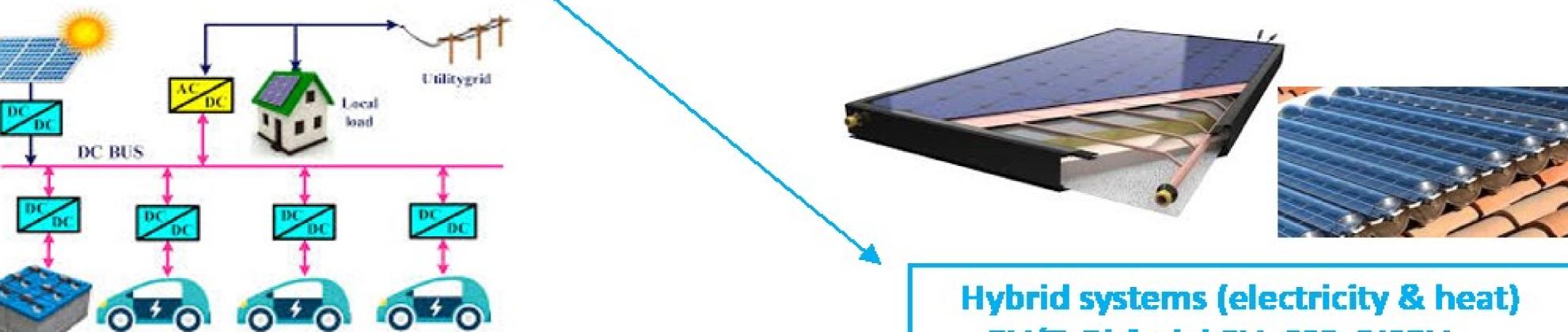
Solar farms in peri-urban environment

Smart (micro) grids, smart energy management V2G, energy storage systems





Unobtrusive integration in buildings (BIPV, transparent PV....)



PV/T, Bi-facial PV, CSP, BISPV, ...

# Innovations/technologies: smart grids, PV/T hybrid systems BIPV, transparent PV, CSP

### Challenges

- expensive (pricing system, maintenance)
- no local production (insufficient competition)
- not know to larger public (lack of appropriate information)
- not yet proven/applied on longer term and large scale

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