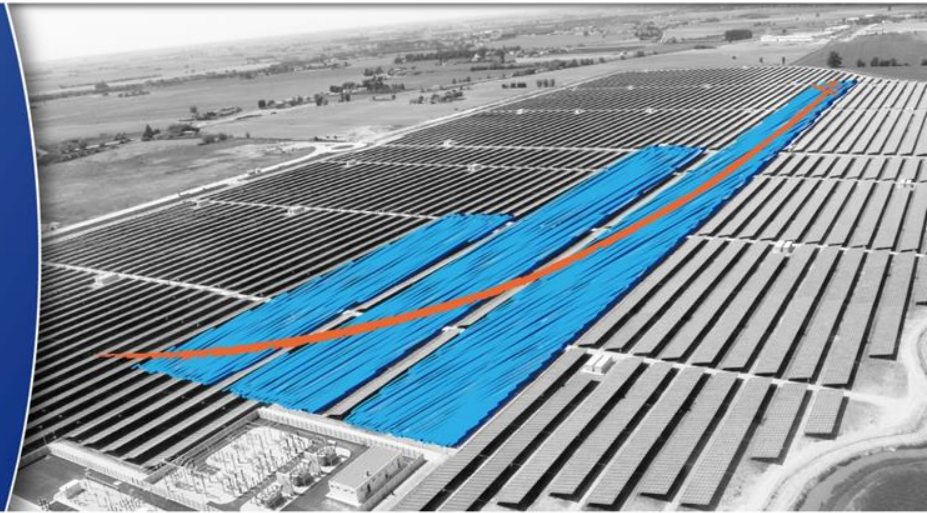


The tenant solar supply model in Germany - “Mieterstrom”



Luz Aguilar, International Project Manager, BSW-Solar

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German Solar Association



TASK To represent the solar industry in Germany in the thermal and photovoltaic and storage sector

VISION A sustainable global energy supply provided by solar (renewable) energy

ACTIVITIES Lobbying, political advice, public relations, market observation, standardization

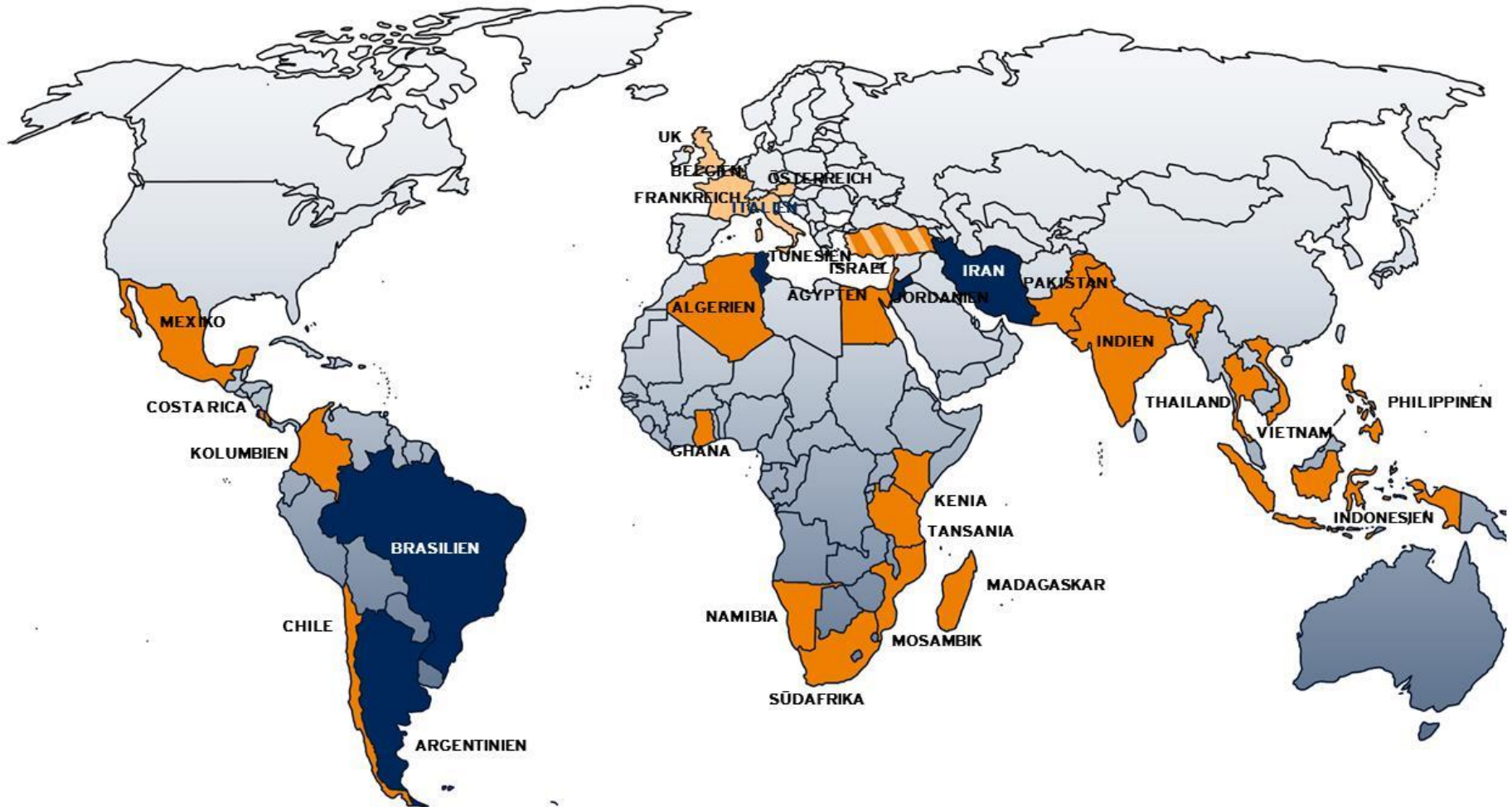
EXPERIENCE Active in the solar energy sector for over 30 years


REPRESENTS More than 800 solar producers, suppliers, wholesalers, installers and other companies active in the solar business from all over the world


HEADQUARTERS Berlin




BSW-Solar: Working world wide to improve frameworks for the use of solar energy

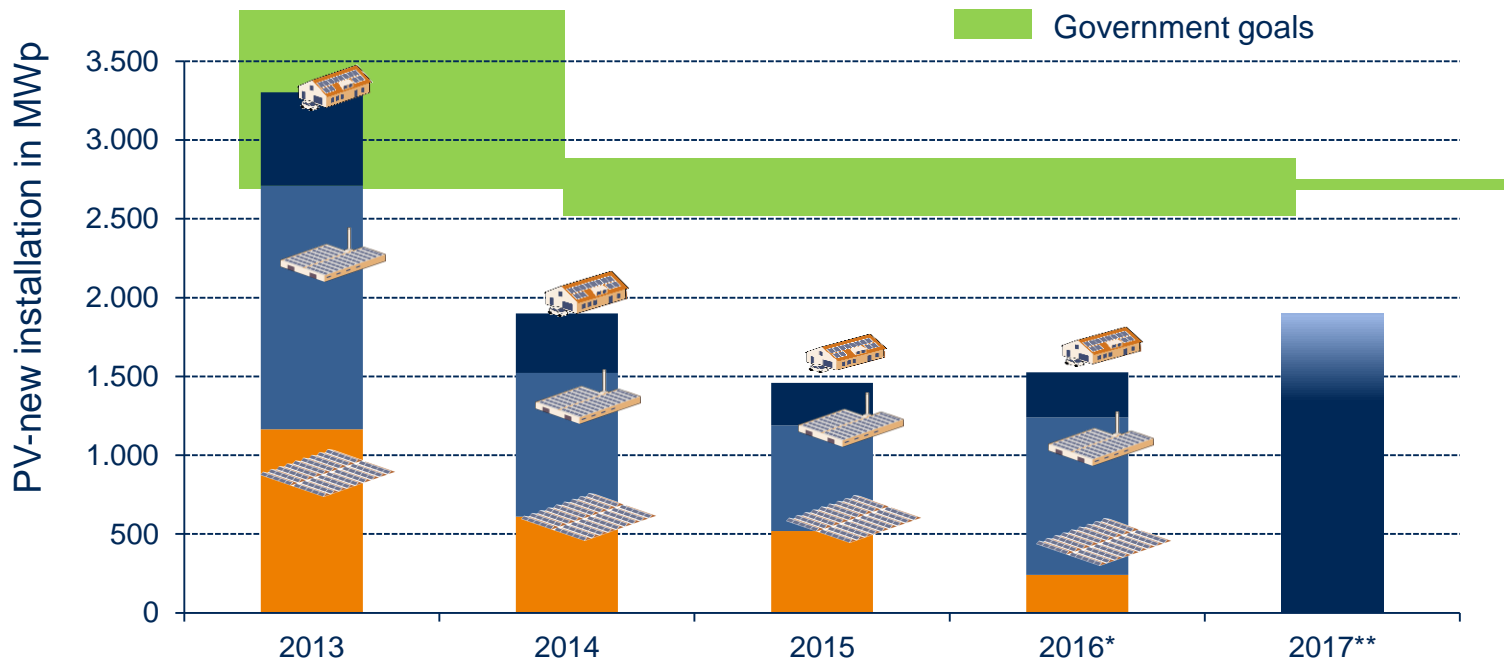


 Partnerships, business networks

 Market reports, esp. "Enabling PV"

 Partner countries in "PV FINANCING"

Slight growing installation in 2017



** Expected installation in 2017: 1.600 bis 1.900 MWp

Source: BNetzA, BSW-Solar 1/2017

- 2016 =1,52 GWp installed vs.1,46 GWp in 2015
- Growing installed capacity in the commercial sector
- Still not meeting government targets

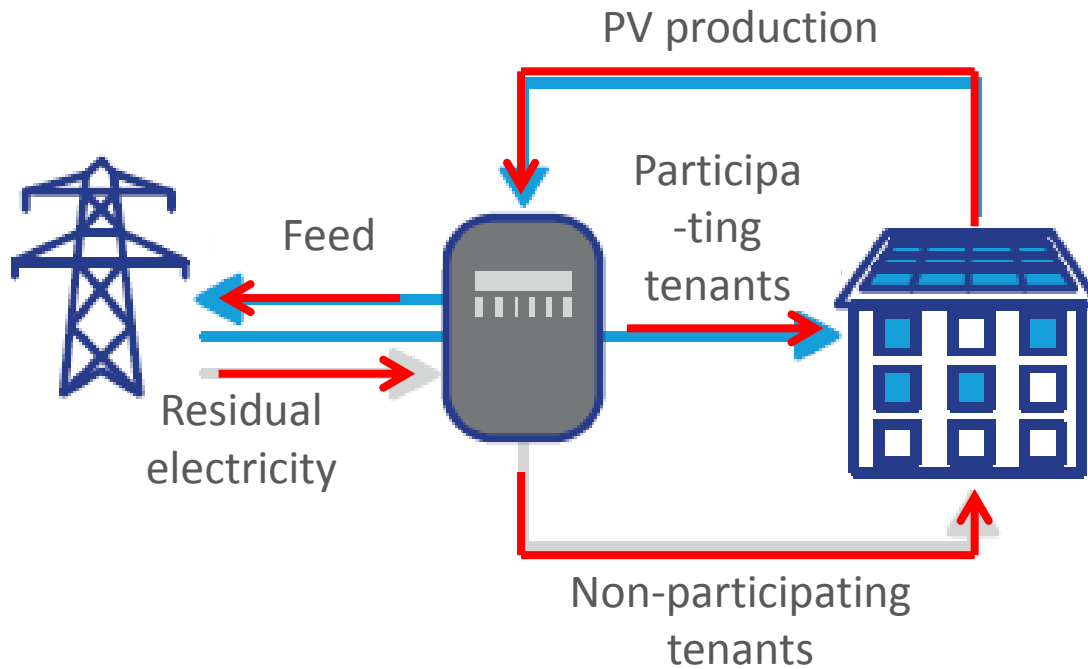
Definition of “Mieterstrom”

- **The tenant solar supply model is a decentralized / locally generated** electricity from PV plants (and/or CHP), which is used directly by the tenants in multi-family houses or commercial buildings
- Direct supply is allowed by the German Renewable Energy Act (EEG) fulfilling the following criteria:
 - Delivery to a third party (NO person identity)
 - Close proximity to the area
 - Without using the grid
- A building can have participating and non-participating tenants

Mieterstrom Law: 26th April 2017

- Before: payment of full EEG-surcharge 7,3 ct. /kWh (2017)
- Mieterstromgesetz:
 - The PV plant owner or operator (who could be a company or the lessor) will get the following premium (equivalent to the FiT – 8,5 ct):
 - **Up to 10 kW = 3,81 ct/ kWh (FiT: 12,31 ct/kWh)**
 - **>10 kW to 40 kW: 3,47 ct/kWh (FiT: 11,97 ct/kWh)**
 - **>40 kW to 100 kW: 2,21 ct/kWh (FiT: 10,71 ct/kWh)**
 - The PV system should be in the building *
 - Contract of electricity supply for 1 year (without automatic extension*)
 - Restriction: up to 500 MW pro year
 - Publication in the official journal expected in July 2017

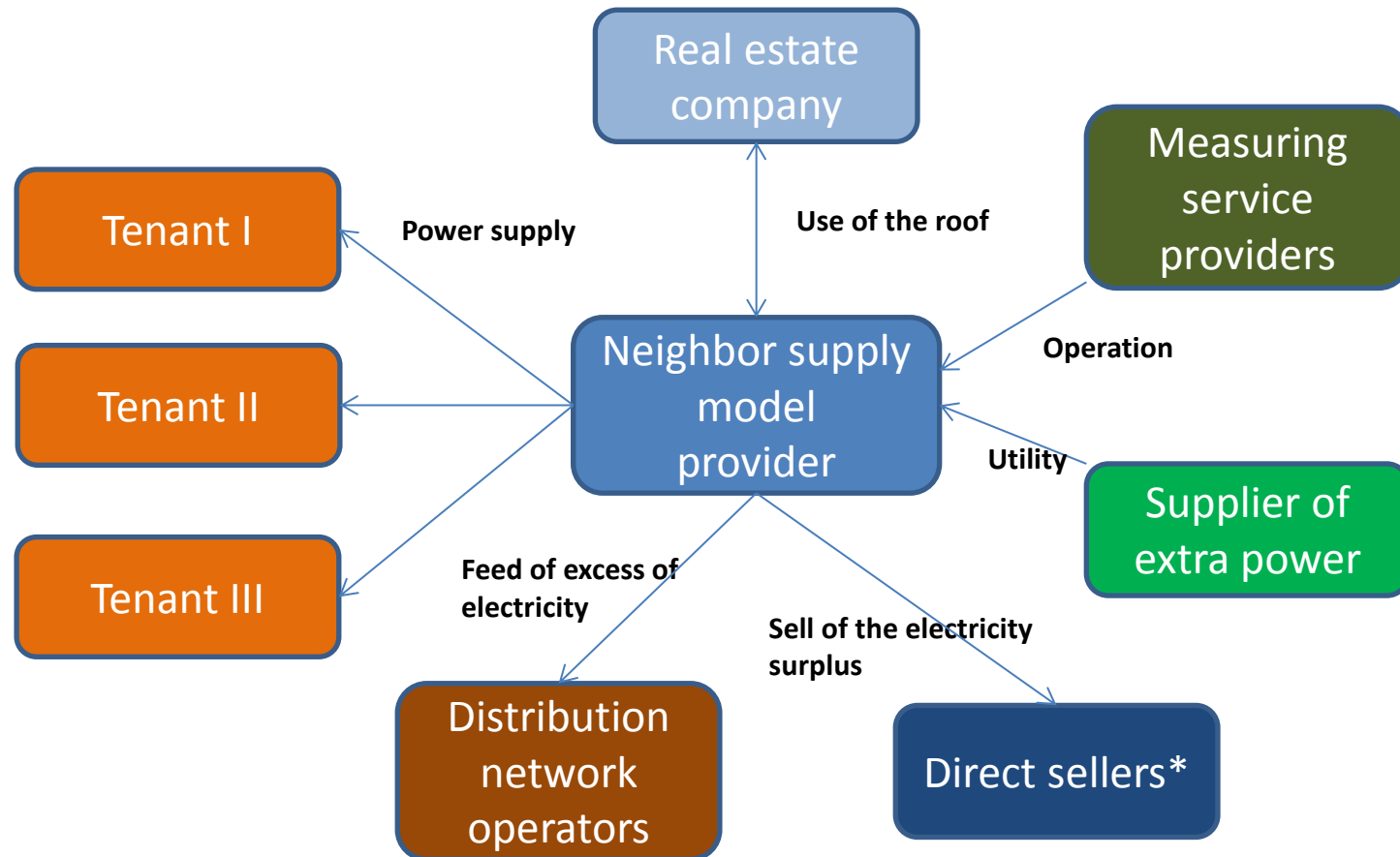
The tenant supply model



Actors & roles

Stages	Tasks	Possible players
Building envelope	Provision of the surfaces for PV generation	Real estate companies
Electricity generation	Planning, installation, financing, M&O of the PV installation	Utilities, service providers, real estate companies
Electricity delivery	Metering point operation, billing, marketing and customer acquisition, purchasing and delivery of grid power, customer service	Utilities, cooperatives, real estate companies that are supported in this regard by various service providers, e.g. for measuring point operation and billing
Electricity consumption	Close of a electricity contract, electricity consumption	Private or commercial final consumers (= tenants)

Contractual relationships of the players



*Direct markers (from 2016 > 100 kW)

Principal players

Real estate sector players:

1. The cooperative real estate
2. The municipal real estate
3. The commercial real estate
4. Homeowners' associations



Energy sector players:

1. Public utilities and energy supply companies
2. Green electricity providers
3. Energy cooperatives

Market potential

- Potential users of the neighbor supply model are:
 - Private tenants in multi-family houses
 - Real State Companies
 - Commercial tenants
 - Dormitories
- Number of multi-family houses: approximately 21 million apartments; About **3 to 4 million** of these (up to 20 percent) are eligible for the supply model.*
- If the potential is fully exploited, consumption of approx. 3 TWh.
- Participating households can usually cover 25 to 35 percent of their own electricity requirements via the PV system.



*Estimations of BSW-Solar

BEST PRACTICE EXAMPLE

Energy cooperatives

Heidelberger Energiegenossenschaft eG:

First cooperatively organized provider

- 7 PV installations with total capacity of 445 kWp
- Supply with PV electricity to 119 tenants
- From the energy sector the housing cooperative was supported by service providers like Bürgerwerken, Naturstrom, and Discovergy.



Thank you for your attention

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