



**EDF Trading
Intersolar 2021**



- ❑ EDF Trading
- ❑ Overview structures of PPAs vs. FIT
- ❑ Drivers from O&M perspective for improving the value of a PPA
- ❑ Special view on prices this Winter and how to secure Market value

OVERVIEW



A large portfolio of managed assets, proven expertise and global capability to provide market access, asset optimisation, risk management, supply and logistics services



Worldwide interests stretching from Australia to China, France, Japan to the UK, Canada and the US



Around 800 employees located in Europe, the United States, Canada and Asia

Baa2

A Baa2 credit rating from Moody's

€3 BILLION

Shareholders equity of €3 billion



Active in the electricity, natural gas, LPG, oil and environmental products markets. Also active in the coal and freight and LNG markets via JERA Global Markets.

100%

A 100% owned subsidiary of EDF S.A., the world's biggest electricity generator



Principal business locations: Europe (London, Paris), North America (Houston) and Asia (Singapore)

Overview PPA vs. FIT

FIT (feed in tariff)

- ❑ Fixed subsidy level: a) subsidy auction: b) Predefined subsidy

PPAs (Pay as produced)

❑ Physical PPA

- ❑ New build PV assets: directly entering a PPA instead of subsidy; GOOs can be generated
- ❑ existing PV assets: voluntary leaving the subsidy scheme for existing assets; GOOs can be generated

❑ Financial PPA

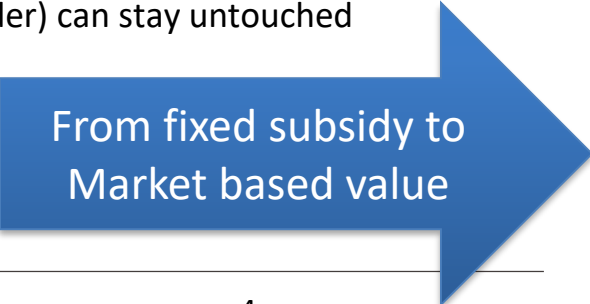
- ❑ Comment: In markets like Spain, Italy, Nordic, financial products are much more common as it separates financial hedging from physical flow
- ❑ Hourly spot indexed PPA: the Solar PV Asset is staying in the subsidy regime and can fix a higher level for periods, that are above the subsidy level. The physical direct market access contracts stays untouched
- ❑ Market value PPA: Asset secures the monthly Market premium for periods, that are above the subsidy level -> EDF offers monthly market value PPA, taking all physical and volume risks
- ❑ Both financial products can work for existing or new build Assets

❑ Advantage of the financial PPA:

- ❑ No exit of subsidy schemes is required; No nomination to TSO, procedure with DMA (direct market provider) can stay untouched
- ❑ As not all DMA provider can do PPAs, a higher market competition can be achieved

❑ Advantage of Physical GOO:

- ❑ The green value of the GOO can be generated; potential higher interest for industry



From fixed subsidy to
Market based value

Drivers from O&M perspective for improving the value of a PV PPA

Existing assets and new build assets:

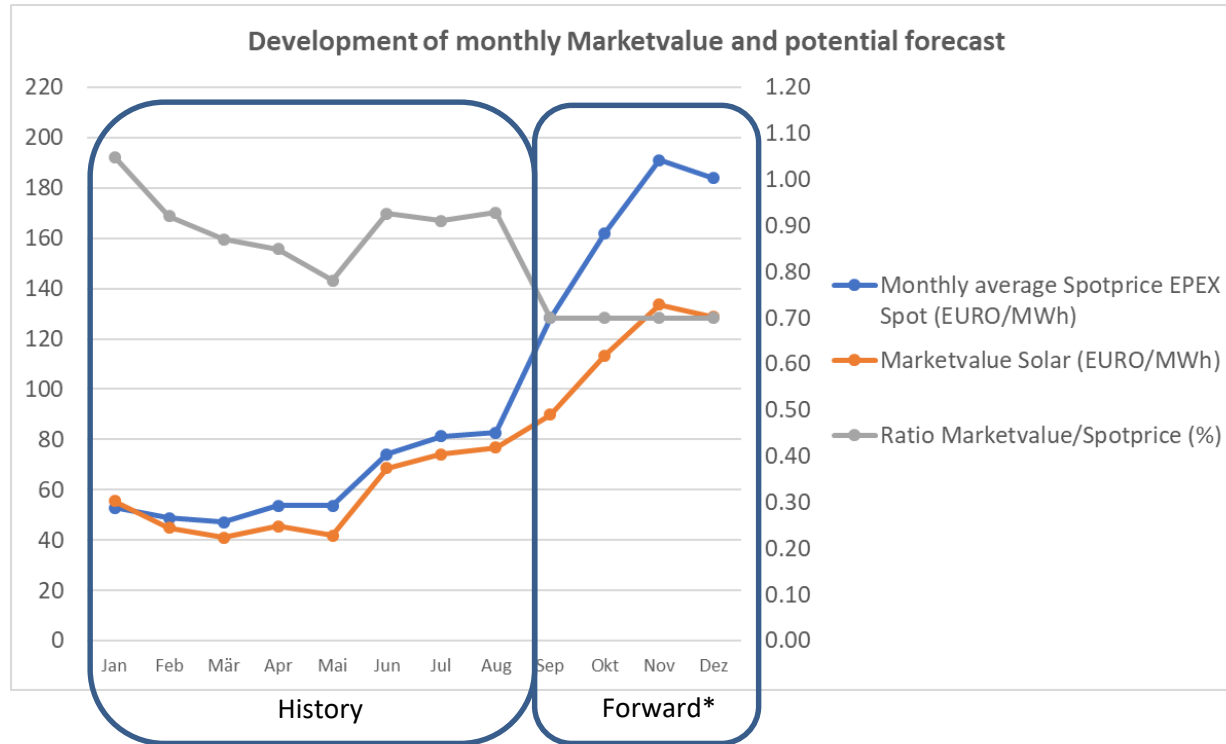
- ☐ Tracker system to produce in ramping hours
- ☐ Open, standard, and stable Scada system with accessibility for PPA offtaker
- ☐ Reliable online data availability
- ☐ Clean and long historic production time-series incl.
 - ☐ Grid-Curtailments
 - ☐ Outages
 - ☐ Other modulation of production
- ☐ (Insurance for technical availability)
- ☐ Long life-guarantees on technical components
- ☐ High quality of O&M contract
 - ☐ Speed of outage recovery
 - ☐ Continuous maintenance
 - ☐ Replacement components available
- ☐ Financial statements of the SPVs

Additional for new build Asset:

- ☐ Certified hourly yield forecast
- ☐ Commitment to high quality ranking of envisaged main components within PPA
- ☐ Grid-connection study with potential outage and curtailment risks
- ☐ Less relevant for the PPA value: the overall yield (efficiency)
- ☐ Transparent economic model of the SPV

Investment in above aspects can increase the PPA value; The more risks the PPA-offtaker shall take, the more he will compensate for investment in reliability

Special view on prices this Winter and how to secure Market value



Monthly Market value is currently forecasted 90-120€ for Winter 2021*; but highly at risk

Solar Market value Sum 22*: ~ 70-80EURO/MWh

EDFT offers to secure the monthly market value on forward basis via financial product: alternatively a physical PPA would work as well