Agro PV – Next2Sun’s vertical installations

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Our Concept

1. Simultaneous use of land for agricultural or ecological purposes
2. Better network integration: Power generation peaks in the morning and evening hours
3. Higher yield and higher market value
System Layout (view from south)

- Bifacial frameless glass-glass modules
- Linear habitat structures adapted to ecological requirements
- Rack
- Agriculture (grass or crops) or habitat development
- Module row height 3 m approx.
- Row distance 10 -15 m
- Distance from ground surface – module 0.6 - 1.0m
Agriculture and Livestock Farming

- Land cover < 1%
- Unchanged water balance
- Very little impact on vegetation growth as PV plant requires only 10-15% of solar irradiation
- Support of bio-diversity
- Row Spacing of 10 - 15 m allow the usage of conventional agricultural machinery
- 90% of the solar park area can be used for agricultural purposes
Better network integration & gaining energy yield

- Production profile with peak production in the morning and in the evening hours
- Areas with network bottlenecks can also be used
- 5 – 15% higher specific energy yield compared to conventional PV
Price gain

- 5 – 10% higher market profits compared to conventional PV plants (based on EEX prices Germany)
- Higher sales price per kWh solar power of currently ~0.30 Eurocent / kWh in the morning and evening hours
PV plant Dirmingen

Location: Dirmingen, South-West Germany
Size: 7 hectares with about 5,700 bifacial modules (60% n-PERT, 40% heterojunction)
Energy output: 2 MW (supply for 700 households)
Annual energy output: 2,150 MWh/year
Put into operation: 2018
Europés first bifacial, free-standing photovoltaic plant in such magnitude
Bifacial solar fence

- The innovative fence system with double function:
  - Fencing & solar power production
- Shadow for livestock
- Great flexibility in the choice of the lower fence element (wire mesh, bar grille, privacy panel)
Thank you for your attention!

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