

**Next2Sun**

# Agro PV – Next2Sun's vertical installations

*6<sup>th</sup> bifi PV Workshop 2019*

*Amsterdam, 16<sup>th</sup> of September 2019*

*Christian Meyer*

# Our Concept



1

- Simultaneous use of land for agricultural or ecological purposes

2

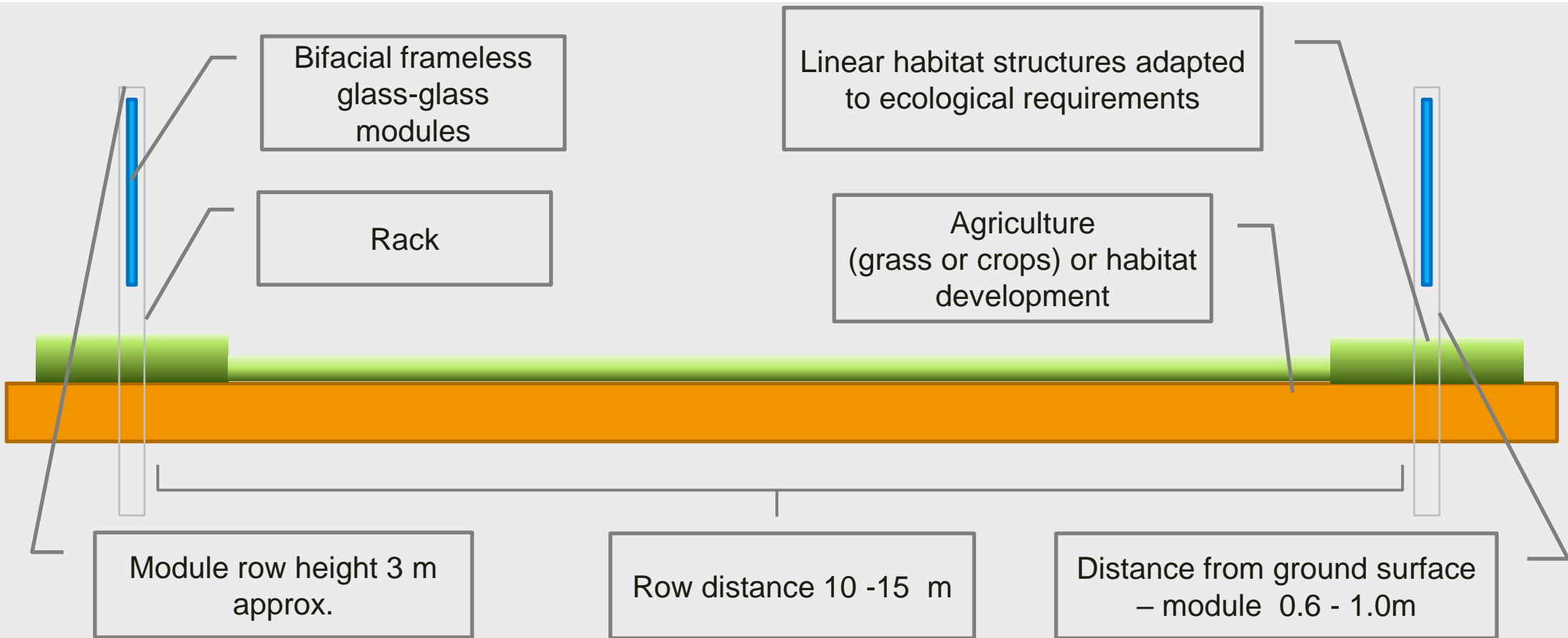
- Better network integration: Power generation peaks in the morning and evening hours

3

- Higher yield and higher market value



# System Layout (view from south)



# 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



# AGRICULTURAL USES

Grassland / grazing land

Ecological enhancement through extensification

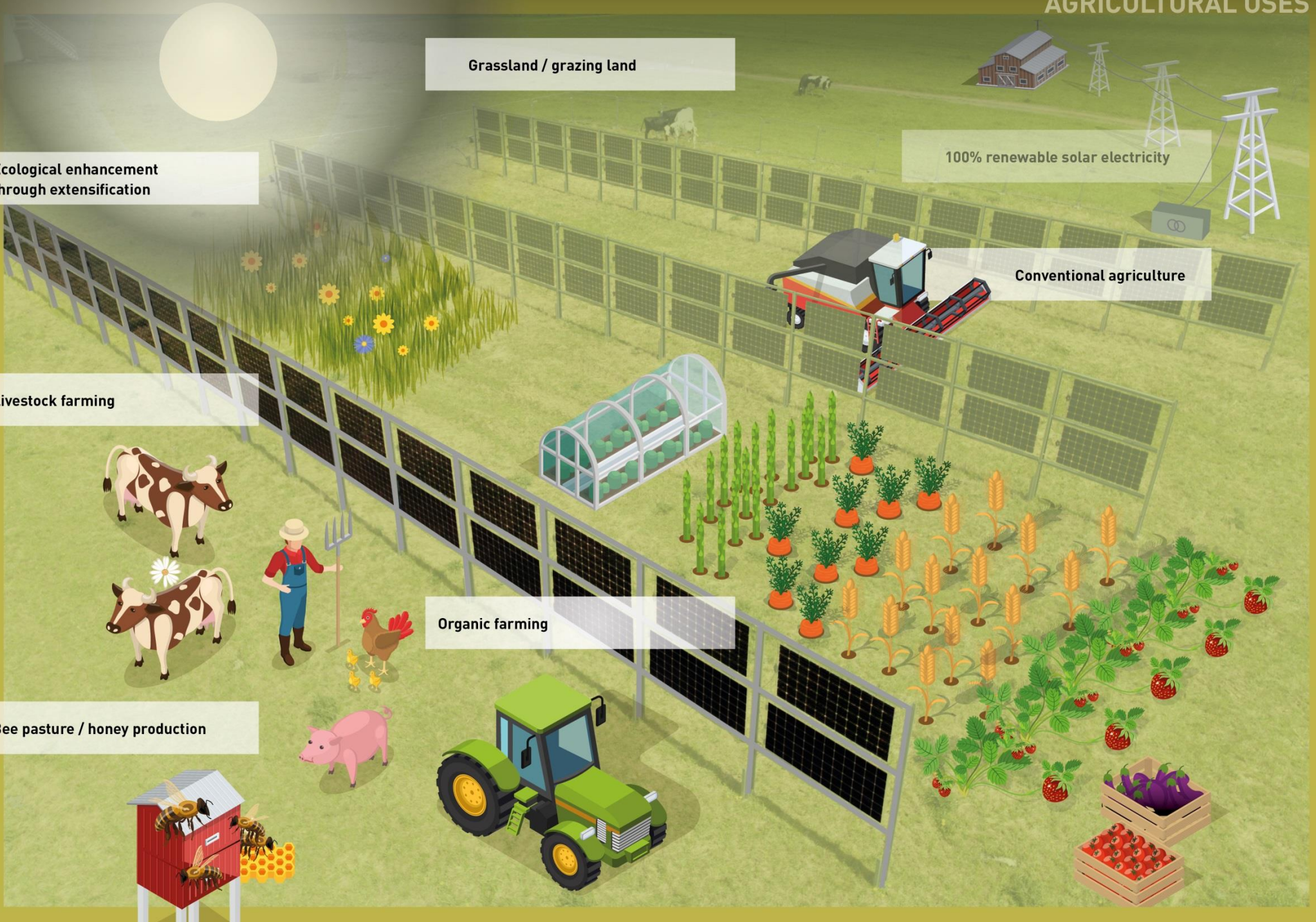
100% renewable solar electricity

Conventional agriculture

Livestock farming

Organic farming

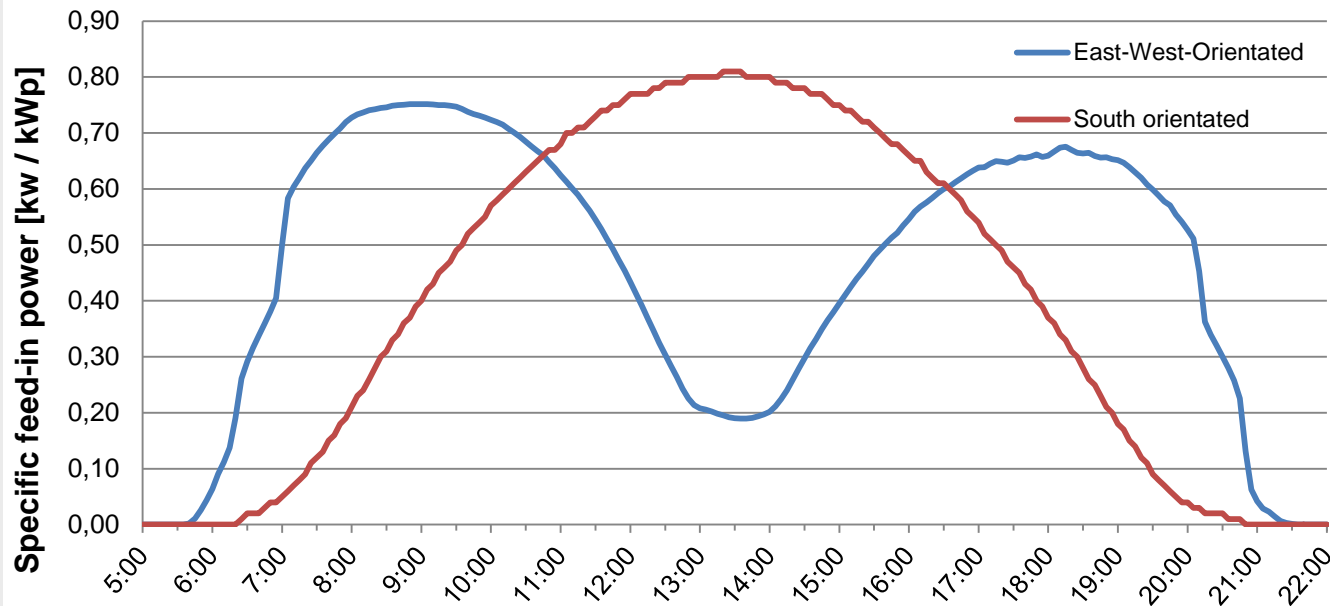
Bee pasture / honey production



# Better network integration & gaining energy yield

Plant performance during the day [kW / kWp]

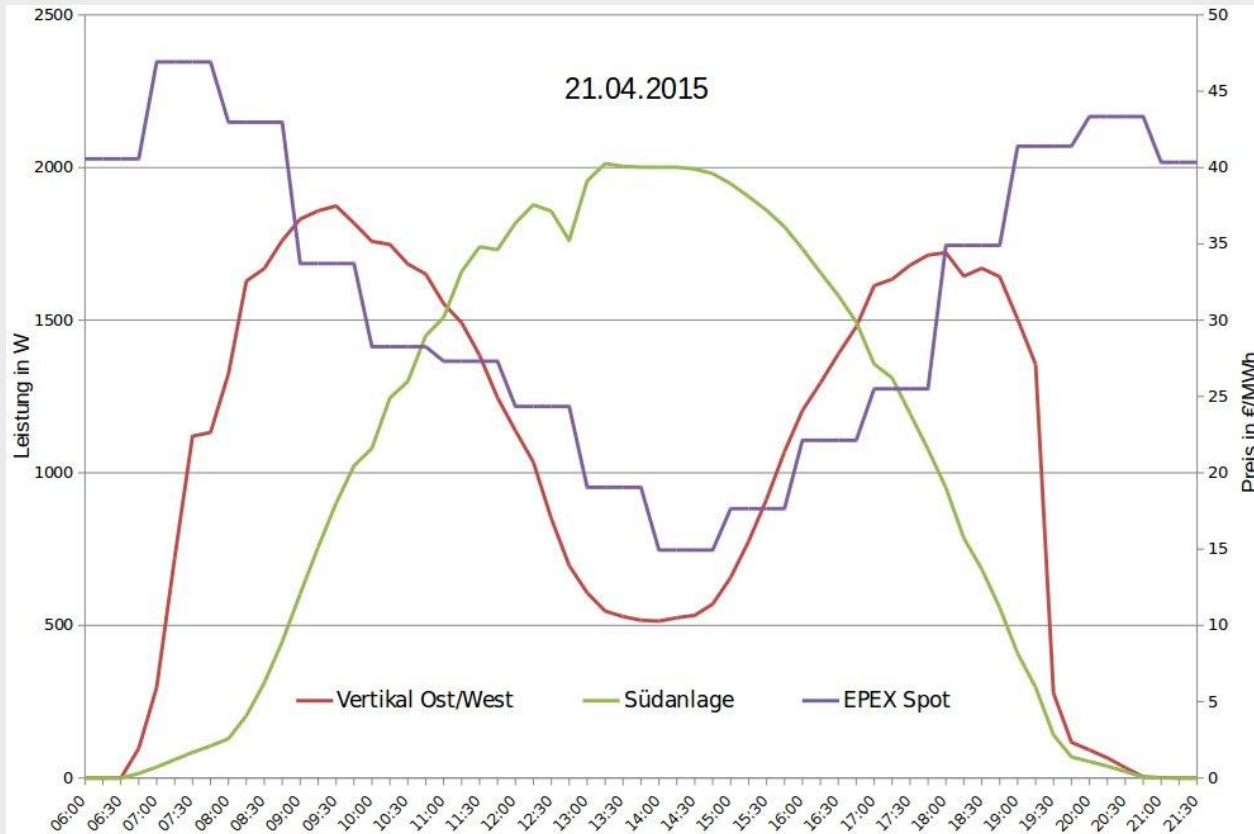
26.05.2017



- 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!



- Christian Meyer

- [christian.meyer@next2sun.de](mailto:christian.meyer@next2sun.de)

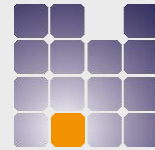
- +4976145893156



**Next2Sun**



# Contact



**Next2Sun**

info@next2sun.de · www.next2sun.de



**Büro Merzig**

Trierer Straße 22  
66663 Merzig

+ 49 6861 – 829 12 12



**Büro Berlin**

Helmholtzstraße 13/14  
10587 Berlin

+49 30 – 286 403 17



**Büro Freiburg**

Am Rotschachen 10a  
79110 Freiburg

+49 761-458 927 04



**Next2Sun**