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"APV-Resola" Project: Project Partners and their Work Fields

The aim of the project "APV-RESOLA" is to develop and investigate a new type of photovoltaic (PV) system that enables the dual usage of agricultural land for both PV electricity production and crop growth. Agricultural, technical, energy-related, economic and ecological aspects are analyzed in the project just as the needs and not least the creative potential of the local stakeholders. The project partners are:

Fraunhofer Institute for Solar Energy Systems ISE:

The Fraunhofer Institute for Solar Energy Systems ISE is committed to promoting energy supply systems which are sustainable, economic, safe and socially just. Beyond basic research, Fraunhofer ISE works on the development of production technology and prototypes. The Institute has many years of experience in grid-connected PV systems and off-grid systems as well as building-integrated PV systems (BIPV) and ground-mounted systems installed on open spaces. In order to mitigate the growing competition for land between the agricultural and energy sectors, Fraunhofer ISE carried out an internal research project that demonstrated that energy and food crops can be simultaneously produced on the same acreage.

Work field: Energy and Technology Contact persons: Stephan Schindele and Tabea Obergfell

Faculty of Agricultural Sciences, University of Hohenheim:

The Faculty of Agricultural Sciences at the University of Hohenheim, with currently 48 professorships, is the largest faculty in agricultural science within the German-speaking countries and also has the broadest range of expertise. In terms of both teaching and research, the Faculty contributes significantly to the development and evaluation of sustainable

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production techniques in agricultural and nutritional sciences, as well as to the preservation of rural areas and animal welfare, consumer and environmental protection. With the different institutes in the fields of plant science and agroecology, the Faculty of Agricultural Sciences holds decades of experience in the research and development of new and sustainable land use systems and their technical and ecological aspects.

Work field: Agriculture and Environment Contact person: Prof. Dr. Petra Högy

Institute for Technology Assessment and System Analysis, Karlsruhe Institute for Technology (KIT):

The Institute for Technology Assessment and Systems Analysis (ITAS) investigates scientific and technological developments with a focus on their impacts and possible systemic and unintended effects. Major goals are advice for research and technology policy and the provision of knowledge for the design of socio-technical systems. Research themes are, for example, structural patterns of innovative processes, interdependencies between technical innovation and business innovation processes, and the governance of new technologies. Problem-oriented research that involves both scientific and non-scientific actors plays a major role.

Work field: Society (Living Lab approach) Contact person: Dr. Christine Rösch

Elektrizitätswerke Schönau, EWS (Electricity Supplier Schönau):

The EWS Vertriebs GmbH has been an active, nationwide supplier of renewable electricity since 1999. Currently, the utility has about 160 000 customers throughout Germany. Since the 1990's, the electric utility has been a supporter of decentralized renewable electricity production, above all in the areas of PV and co-generation of heat and power. The buying and reselling of energy as well as numerous direct marketing models have moved increasingly into focus. The EWS Vertriebs

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GmbH has intensified its work on the development of such concepts.

Work field in project: Electricity Feed-in Contact Person: Sebastian Sladek

BayWa r. e. renewable energy GmbH (BayWa r. e.):

BayWa r. e. renewable energy GmbH, a wholly owned subsidiary of BayWa AG, is responsible for the BayWa Group's renewable energy business. It acts as a holding company for various business interests in the areas of solar energy, wind power, bioenergy and geothermal energy. BayWa r. e is active worldwide as a full-service partner with ca. 950 employees and more than 25 years of market expertise, specializing in developing, realizing, consulting and accompanying projects in the field of renewable energies. The company covers the entire spectrum of a professional technical plant support service, including maintenance. It can also undertake the commercial operations management of plants. Other business activities include the trade with PV components as well as buying and selling energy from renewable sources.

Work field in project: System projecting, management and operation Contact person: Edgar Gimbel

Demeter Hofgemeinschaft Heggelbach (Farm community Heggelbach):

The innovative farm community "Hofgemeinschaft Heggelbach GbR" has been running an organic farm based on biodynamic cultivation for 30 years. Today, the farm has 165 hectares of land. As a Demeter farm, the operating principle follows a holistic approach that considers the operation in its entirety. Since 2003, the topic of energy has been a key issue for the farm community. Besides several PV systems, including one for their own use, the farmers installed the first wood gasifier and cogeneration system from the company Spanner. Wood chips are used to provide heating energy for the many buildings on site and additionally electricity is produced and fed into the grid. The farm

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community received the German Solar Prize 2009 for its innovative energy concept.

Work field in project: Agriculture Contact person: Thomas Schmid

Regional Association Lake Constance-Upper Swabia (RVBO):

The Regional Association of Lake Constance-Upper Swabia supports the regional planning for district of Lake Constance, Ravensburg and Sigmaringen with respect to the permitted spatial and lawful building ordinances. With the upcoming update for the regional plan, the Association will examine the practical utilization of the research results across the region and make any specifications, if required, for the regional energy supply.

Work field in project: Inclusion of the districts and communities Contact person: Wilfried Franke

Contact person for further information:

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