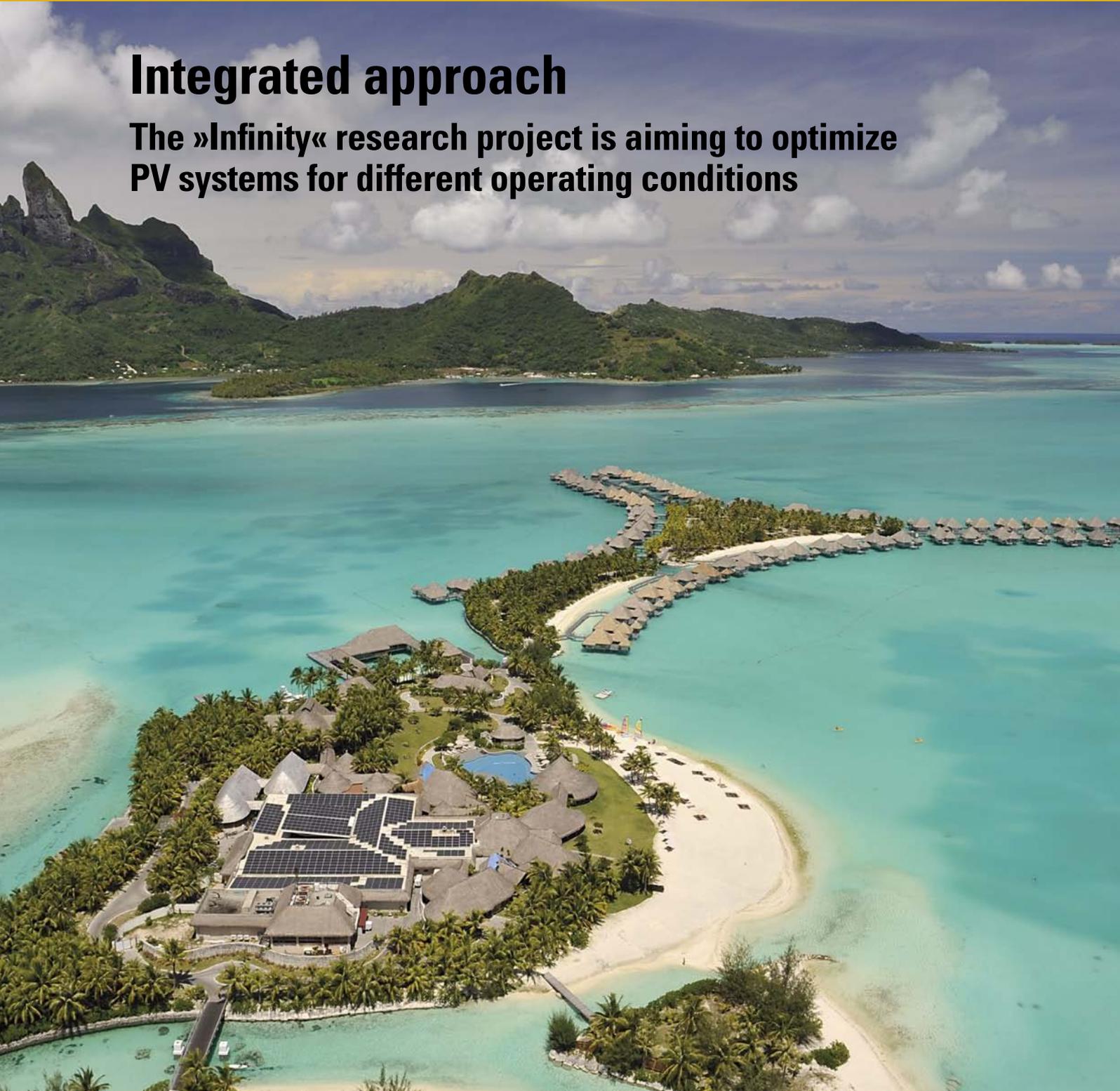


Integrated approach

The »Infinity« research project is aiming to optimize PV systems for different operating conditions



Italy in focus

Latest figures mark the descent into irrelevance for a once leading PV market

Cleaning water

10 percent of the global population lack access to safe drinking water – but solar could help

Off-grid systems

PV-powered infrastructure could offer greater market potential than anticipated

On the up – but not enough

Solar stocks noted a rise, but are still down 7 percent compared to the beginning of the year

Solar bankability: How to overcome technical and investment risks

SolarPower Europe (SPE) is actively engaged in working on the frameworks for investment in solar in Europe today. One of our key projects relates directly to solar bankability. Working with the European Commission and other key solar actors, we will address the risks associated with investments in solar. This is vital for our sector, as project investment is a primary financial factor in enabling sustainable growth in solar installations.

Financial stakeholders, such as investors, lenders and insurers, evaluate the impact and probability of investment risks in different ways, depending on their investment goals. Therefore, risk-mitigation measures are implemented subject to the specific investment perspective governing a project. This also means that diverse business models are applied to different projects with similar aspects in order to satisfy the needs of financial investors.

Our solar bankability project assesses more than 6,000 parameters involved in the design, installation and operation of a PV system to develop a comprehensive risk matrix. These risks are then categorized according to their priority and given a cost to enable a definition of typical technical risk scenarios. This assessment is also based on one of eight main solar business models that the project has already identified. This means that the project is able to deliver a framework for accurate risk assessment against specific business models known to be used in Europe.

I spoke to Matthias von Armansperg from Accelios Solar, a project leader, and he told me that having these business models is vital to mapping risks as »the roll-out dynamics of the business models depend on the national renewable energy policies and associated incentive schemes.« We all know that these vary considerably across Europe and so it is vital that the variations are confronted to make sure the project deliverables really help our sector.

Von Armansperg also told me that new business models are often formed using a combination of one or more generic business

models leading to a higher degree of complexity, such as PV systems being combined with other components such as batteries or heat pumps. In many cases, more stakeholders are getting involved and have to be aligned. Thus, our project is introducing a business-model configurator to structure and visualize the complexity of different business-model constellations in a transparent way.

Seven countries in the European Union (EU) have been selected for benchmarking solar business models – Germany, Italy, France, Spain, the UK, the Netherlands and Romania. The project examines their framework conditions, the business model roll-out status and examples of new emerging business models. So far, the project has extracted key messages from this country-based research and has identified trends and future requirements including:

1. Reliable political framework conditions are needed to ensure future investor support for PV installations.
2. In many national markets, self-consumption is on the brink of economic viability.
3. Rapid decline of storage battery prices will stimulate further growth of self-consumption.

This project will ultimately provide guidance to policy makers, financial market players, PV plant owners, component manufacturers and energy prosumers on how to jointly develop new business models in order to successfully integrate solar into existing power markets. This will facilitate the smooth transition from conventional to renewable energy sources and will help Europe meet enhanced targets relating to greenhouse gas emissions.

The good news is that the model results will be summarized and published in a report by August 2016, and a list of adequate risk-mitigation measures will be developed and described in a best-practice guide on technical bankability in January 2017. We can, therefore, look forward to improved investor understanding of solar in the very near future.

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European Photovoltaic Industry Association (EPVIA)

▲ Dr. James Watson, CEO of SolarPower Europe.

Contribution to Electricity Public Services (CSPE), by 39 percent from €19.50 (\$21.45) per MWh in 2015 to €27.05 (\$29.76) per MWh in 2016. If the French government does not ratify the authority's proposal by the end of 2015, the CSPE will automatically be increased by €3 (\$3.30) per MWh starting from Jan. 1, 2016. The CRE said that the CSPE increase was mainly due to the development of solar and wind power projects across France.

The CSPE – which covers subsidies for renewable energy incentives, among other things

– will account for approximately 16 percent of the average French household's electricity bill in 2016, if the increase is limited to €3 (\$3.30) per MWh. The CRE estimates that the CSPE will have a total budget of €7 billion (\$7.7 billion) in 2016.

France's Ministry of Ecology, Sustainable Development and Energy has published a decree in the country's official journal with which it confirms that the FIT for rooftop PV systems with simplified integration with a power of up to 36 kW, the so-called FIT T4,

was increased by 5 percent for the third quarter of 2015. The measure is aimed at reviving the country's residential PV segment.

The CRE has published the coefficients to calculate the FIT rates for rooftop PV systems for the fourth quarter of 2015. The coefficient is based on the capacity of PV systems for which grid connection requests were submitted to the CRE in the previous quarter. According to the regulator, it received grid connection requests for rooftop installations totaling 57.6 MW in the third quarter of this year. Of