

# Executive Summary Guidelines on PV Financing Schemes

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PV Financing Project

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## Executive Summary

The goal of the PV Financing project is to help stakeholders from specific application segments with the implementation of PV projects based on new PV business models while applying innovative equity and debt financing schemes. The countries covered by the project are Austria, France, Germany, Italy, Spain, Turkey and UK.

As part of the tasks focussed on the analysis of the financing schemes, guidelines have been prepared for each of the covered markets, in English as well as in the local language. For the guidelines two schemes were selected from the list of financing schemes previously identified: a traditional/ the most representative scheme and a more innovative scheme.

For each of the schemes an introduction has been given, the application segments and related business models in which it is being used have been named and a description of the implementation process has been provided. External conditions that could influence the scheme or its implementation have been identified and, where possible, examples of key players (organizations or companies that provide financing through the selected scheme) have been indicated.

Summarizing the guidelines, it can be seen that loans are the most widely used financing scheme in almost all of the covered markets. They seem to be used for all application segments and PV installations of all sizes. Crowdfunding is a more innovative financing scheme and is gaining importance in several of the countries. Other financing schemes that have been included are sale and lease back, leasing and green cooperatives.

The following schemes that have been presented in each country:

- For **Austria**, debt financing through **loans** is the most widely used scheme for PV installations, especially for larger corporate projects, as commercial customers with sufficient securities are generally offered good conditions by banks. As a newer scheme, the **sale and lease back** model has been chosen which is used for larger systems in the commercial and public sector. It became popular in the context of financial citizen participation.
- In **France**, the financing scheme **loan** has been presented as it is the most common scheme that is used for photovoltaic projects of any scale. **Crowdfunding** is a more innovative scheme, which is spreading quickly in France and a few crowdfunding platforms specialized in renewable energy projects exist.

- Schemes such as **leasing** and **crowdfunding** currently support and ease the financing of PV projects in **Germany**. Leasing gives the possibility to self-consume the PV electricity and pay the reduced EEG surcharge without investing. Crowdfunding is an innovative way of raising money for PV investments directly from a large number of people, usually used in the residential (multi-family), commercial, industrial and public sector.
- **Loans** have been presented as the most used solution at the moment in **Italy**, especially used for mid-sized and large PV projects, ranging from 100 kWp to several MWp. While **crowdfunding** is the most innovative scheme, not yet used but, as confirmed by many interviewed stakeholders, one of the most promising solutions for overcoming the current financing barriers for PV. It addresses different market segments, from small and medium plants in the residential or commercial sector (50 - 200 kW<sub>p</sub>) to larger utility scale plants for large commercial or industrial users (up to 2 - 3 MW<sub>p</sub>). In guidelines for **Spain**, the same schemes as for Italy and France have been included: the most representative in the country, which are **loans**, and the most innovative financing scheme, which would be **crowdfunding**. Neither of them are common in Spain today, as the few people installing PV nowadays do it through self-funding.
- For Turkey, debt financing through **loans** is the most widely used scheme for PV installations for single and multifamily residential, commercial sector and public and industrial sector application segments. **Green cooperatives** serve as an example of a more innovative scheme for the residential, commercial sector, public as well as the industrial sector. Green cooperatives are not yet operating, although several of them have been set up.
- In the **UK**, **self-funding** and **loans** have formed the bulk of domestic and commercial installations until now. Both pure self-funded schemes and debt financed schemes are being discussed. **Crowdfunding** is presented as the most innovative scheme for the UK market and could become more prevalent in the future.

With this deliverable we have completed the analysis of the financing schemes. The PV Financing project will now focus on preparing national PV project guidelines, which will provide segment- and country specific practical support for stakeholders and project developers during the implementation and financing processes of PV installations, as well as on policy recommendations to remove the barriers identified during the project.