



Workshop: Regional and local approaches to fight energy poverty  
17 March 2021

# QUANTICA Solution for Residential Solar Energy **Alquiler QUANTICO**

**Javier Becerra Sánchez**  
QUANTICA Renovables



**Interreg  
Europe**



European Union | European Regional Development Fund



# QUANTICA

RENOVABLES



GRUPO QUANTUM



# QUANTICA Renovables

## QUANTICA Experience

Commercial and Execution Teams : + **100 engineers / installers, zero subcontracting.**

Residential Project: Complete installation cycle , from project legalization, design, supply and installation.

We also carry out operation and maintenance during the useful life of the projects.

## Current Market Position

**Own Execution:** +2,500 projects in Andalucía and Levante , growth in volume and scale (+ 5MW) .  
Mainly residential projects, industries and large companies.

**Regions:** Geographical diversification, main activity in best radiation zones: **Levante + Andalucía.**

A group of experts in renewables energies with extensive experience in multinational companies in the PV sector has gathered at QUANTICA Renovables. His experience has kept photovoltaic technology as a common denominator since 2006, developing as expatriates in several countries: From Chile, Italy or UK to Brazil and Japan.

**Our core business:** development, construction and operation of large PV plants; bringing our *knowhow* and market experience to Spanish market through QUANTICA Renovables.



# Residential PV in Spain

## Situation Approach

Self-Consumption for Residential. The residential consumer faces the highest bills in Spain history and does not really count with big support that aims to price reduction alternatives.

COVID-19 at first and Ukrainian war recently have reduced household income, increases job uncertainty and saving vs spending.

Fast and mixed solutions have been required by public opinion: both for the reduction of energy costs and for the financial needs of the solution.

## Spain - Market Overview Solar PV

**2018:** deep change in legislation: “SUN TAX” derogation that facilitates the development of Self-Consumption: huge market opportunity.

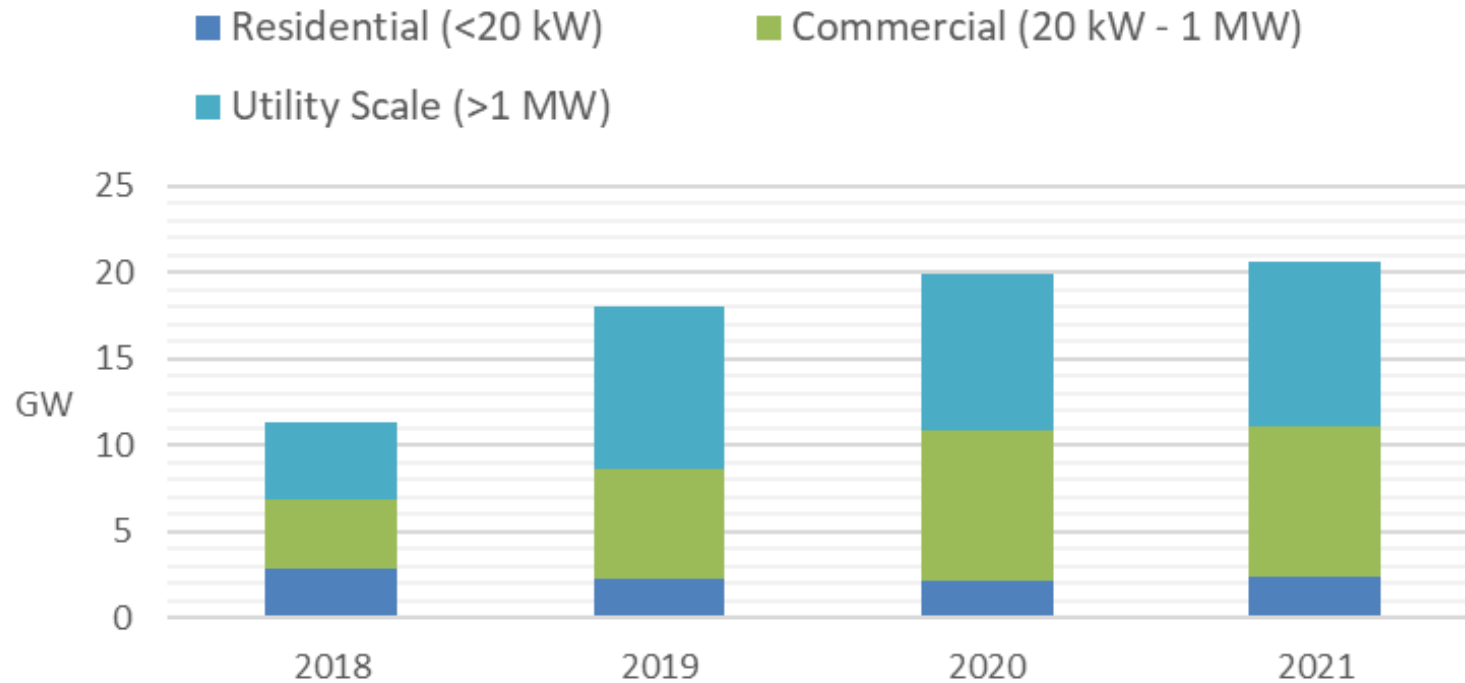
Improvement in Self-Consumption model: surpluses can be sold to the energy pool. There is a reduction of tax burden in many cities.

**Next Step: Shared Self-Consumption.** Possibility of energy distribution among different consumers of the same building or another one within 500 meters radius.



# PV segments in Europe

## Europe - Projections By Segment



Source: BloombergNEF



# Alquiler QUANTICO

## Value Proposition

Alquiler QUANTICO

## Vulnerable Groups

- **Clients:** Pre Analysis financial condition, requirements for sustainability of the model
- **Goal:** secure and back all vulnerable groups to allow them to Access this kind of services in the same way as the rest of population
- **Potential example:** large scale solar PPAs for Electointensive: It has been established a Public Guarantee Fund in Spain that provides the guarantees for PPAs investors that these industrial clients sign, allowing better conditions and the development of projects
  - Can be established a similar tool for residential projects for vulnerable groups

## Contract Proposed

- **Quantum:** assumes all the scope for design, legalization, supply, installation of the plant.
- **Quantum:** assumes all the operation and maintenance of the plant, giving a 20-year total guarantee of the plant
- **Consumer:** No investment required. Once the plant is in operation, client start paying monthly fee for Alquiler Quantico
- **Purchase option:** the customer can buy the plant at any time, at a pre-established price that decreases over time (zero at the end of the contract period)



# Example: Solar PV House Sevilla

Residential consumer located in Sevilla region

House connected to grid, average energy necessities, middle income level client.

**Client Description** | Area with high solar radiation (one of best in Spain) Client is interested in the Alquiler Quantico, avoiding making the investment directly (equivalent cost of 5.541 €)

## ► Project Main Parameters

Power Peak - Energy Generation

**2,7 kWp** | **4,55 MWh/y**

- ✓ Substituted energy: 43 %
  - ✓ Emissions Reduced: 1386 kg CO<sub>2</sub>/y
  - ✓ Total Consumption: 8.350 kWh/y
- Total Solar Generation: 4.559 kWh

## ► Contract Main Parameters

- Term: 20 years, Monthly Solar Fee: 46,9 €/m
- Price: IPC indexed, First 6 months reduced payment: 1 Euro / month
- Option to cancel the contract: uninstallation costs and payment of 10% of the remaining fees
- Purchase option: at any time the customer can purchase the plant, at a set price that is reduced over time to 0 at the end of the contract
- Quantum: assumes all the design, legalization, supply, installation of the plant.
- Quantum: assumes all the operation and maintenance of the plant, giving a 20-year total guarantee of the plant.

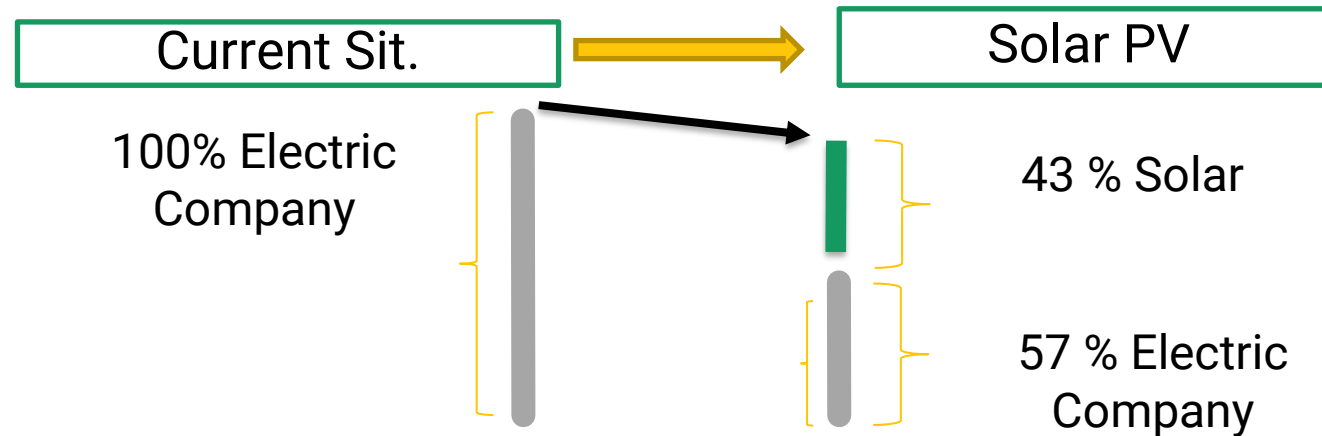
# Example: Solar PV House Sevilla



## Value Proposition for Client

Current Total Cost	1.605 €/y	Monthly Solar Fee	46,9 €/m
Savings First Full Year	368 €/y	First 6 months	1 €/month
Gross Savings 25 years	28.594 €	Net Savings 25 years	16.202 €

20 years Contract / +20y: transferred to client







# Democratizing Solar access

## QUANTICA and Ecrowd

### Market Milestone

- ▶ First time that PV crowdlending is launched as a renting option.  
3,75% yearly fixed profitability.

- ▶ Crowdlending could be a great booster for Energy Transition in Spain. “Users can support other users to build up a new sustainable reality up”

115.000€ have been fundraised in the very first round. We expect to replicate if it is successful

QUANTICA Renovables has established a partnership with Ecrowd, a popular crowdlending site whose aim is to allow renewable projects through crowdfunding formula.

Different profiles of investors may provide the required investment to install and operate Home PV installations through renting formula. The fundraiser, Ecrowd, guarantee 3,75% yearly fixed profit to those investors that support this initiative.

The screenshot shows the Ecrowd website interface. At the top, the Ecrowd logo is centered, with navigation links for 'ENTRAR', 'REGISTRARSE', and 'ES'. Below the logo, a horizontal menu contains links for 'INICIO', 'PROYECTOS', '¿CÓMO FUNCIONA?', 'EVENTOS', 'BLOG', 'DETECTIVE DE PROYECTOS', and 'FINANCIAR MI PROYECTO'. The main content area displays a project titled 'Instalaciones domésticas de autoconsumo - Quantica Renovables - Sevilla' under the category 'Energia'. The project image shows solar panels on a roof with a sign that reads 'ALQUILER QUANTICO'. To the right of the image, the project details are listed: 'ESTADO: EN FASE DE INVERSIÓN', 'DÍAS RESTANTES: 27 días', 'IMPORTE: 115.000€', 'INTERÉS ANUAL: 3,75%', 'CUOTAS MENSUALES: 84', and 'INVERSORES: 139'. A progress bar at the bottom indicates that 50% of the funding goal has been reached.



# Thank you!

Javier Becerra Sánchez  
jbecerra@quanticarenovables.com  
(+34)650536703  
www.quanticarenovables.com



**Interreg  
Europe**



European Union | European Regional Development Fund