



OnRenewables  
on top of renewables



2018

# The Company & Services

# Table of **contents**

<b>03</b>	Company background
<b>04</b>	The team
<b>08</b>	Company Values statement
<b>10</b>	Sustainability
<b>11</b>	Engineering Methodology and Technology
<b>12</b>	Project Management Approach
<b>13</b>	Office Locations
<b>14</b>	General Services provided
<b>15</b>	Design approach



# Company Background

**OnRenewables (OnR)** was founded in June 2017 by Rafael Peris and Jose Carlos Sanchez with the mission to contribute to the ongoing global efforts in the renewable energy sector by using practical, cost-effective and sustainable methods. We believe that by doing so, we can make a difference in preserving and sustaining the environment.

OnRenewables is a global engineering and project management firm for the solar industry. We focus on guiding and supporting our clients in all types of situations. When our clients face challenges we take ownership and accountability to address those challenges.

We bring together professionals from diverse disciplines and with complementary skills, on a uniquely global scale. The depth of expertise and sheer numbers of specialists allow OnR to take on complex, strategic projects that no other firm could deliver so flexible, dynamic, cost-efficient and fast.

No matter the size, big or small, OnR looks at every project with a fresh perspective. We support and promote a willingness to think laterally. Often, the willingness to take a creative approach produces ideas and concepts that may not have been immediately obvious, but which frequently deliver the best solutions.

**OnRenewables** currently serves several customers worldwide and employs six people and several collaborators based in our offices in Valencia (Spain), Marbella (Spain) and Tokyo (Japan).



# The Team





## Rafael Peris

Co-Founder and Managing Partner

✉ [rafael@onrenewables.es](mailto:rafael@onrenewables.es)

☎ +81 90 5440 1010

📱 [rafael\\_peris](#)

Rafael Peris, is the Co-Founder and Managing Partner at OnRenewables. In this role, Rafael is responsible for leading the development and execution of OnR's long term strategic plans and objectives. Apart from that Rafael is also in charge of sales, customer care and overseeing the project management on a day-to-day basis.

Prior to his role at OnR, Rafael was Head of Engineering at Sonnedix Japan K.K. Sonnedix is a global solar power producer with 500 MW of generating capacities, substantially owned by investors and advised by J.P. Morgan Asset Management. Rafael was in charge of all the technical matters and managed the local Engineering Procurement Construction (E.P.C) team with several projects in Puerto Rico and then relocated to Japan to establish and manage the local engineering department.

Rafael's career in the solar photovoltaic (P.V) industry spans over 11 years, his roles range from project developer, site and project manager to engineering and construction leader. His experiences have allowed him to work in various locations such as Spain, Italy, France, Germany, Puerto Rico, Mexico and Japan.

Rafael started his career as an industrial engineer in the automotive sector and as part of the E.P.C team he provided assembly production lines for German and US car makers in Europe after which he moved over to the solar industry in 2006. He then honed his skills and took on management and leadership roles in the solar sector and worked for companies such as Phoenix Solar, AES Corporation and GP Joule.

Rafael holds a Bachelor of Engineering Degree in Electrical and Electronics from the University Polytechnic of Valencia, Spain and then completed with his thesis about on solar air collectors from the Hochschule Mittweida University, Germany.



## José Carlos Sanchez

Co-Founder and Engineering Partner

✉ josecarlos@onrenewables.es

☎ +34 684 24 82 18

📄 jctirado

As Co-Founder and Engineering Partner at OnR, Jose Carlos leads the Engineering and Construction Department.

He also manages the relationships with subcontractors and suppliers. He ensures that the services delivered meet the OnR expectation by providing creative and innovation solutions so that each project reaches its target within budget and within the allocated time frame.

Prior to his role at OnR, Jose Carlos was a PV Designer at "Sonnedix" one of the largest and most successful Independent Power Producers in recent years in the solar industry. Jose Carlos worked for Sonnedix UK (London) from December 2013 to August 2015, he was then transferred to Sonnedix Japan (Tokyo) to support the engineering department from August 2015 to June 2017.

During his professional career, which spans more than 17 years, Jose Carlos earned industry-wide recognition for his expertise in civil and mechanical design, topographical and geotechnical surveys and construction, overall thanks to the technical complexity of the civil engineering and construction projects he was involved. His extensive knowledge in the different sectors such as PV plants, highways, bridges, airports, ports and luxurious villas has led him to work in countries such as Japan, UK, Puerto Rico, Chile, Mexico, Holland and Spain.

Jose Carlos holds a Superior Technical Vocation Training Certificate on Construction Management by the I.E.S Guadalpin, Marbella, Spain.



## Luis Carmona

Lead Drafter

Luis Carmona, is the Lead Drafter at OnR. In his roles, Luis leads the design of technical drawings in the many involved disciplines for solar power plants.

During the past six years Luis worked in various positions as draftsman for different engineering and architect firms mainly for the design and construction of new residential buildings.

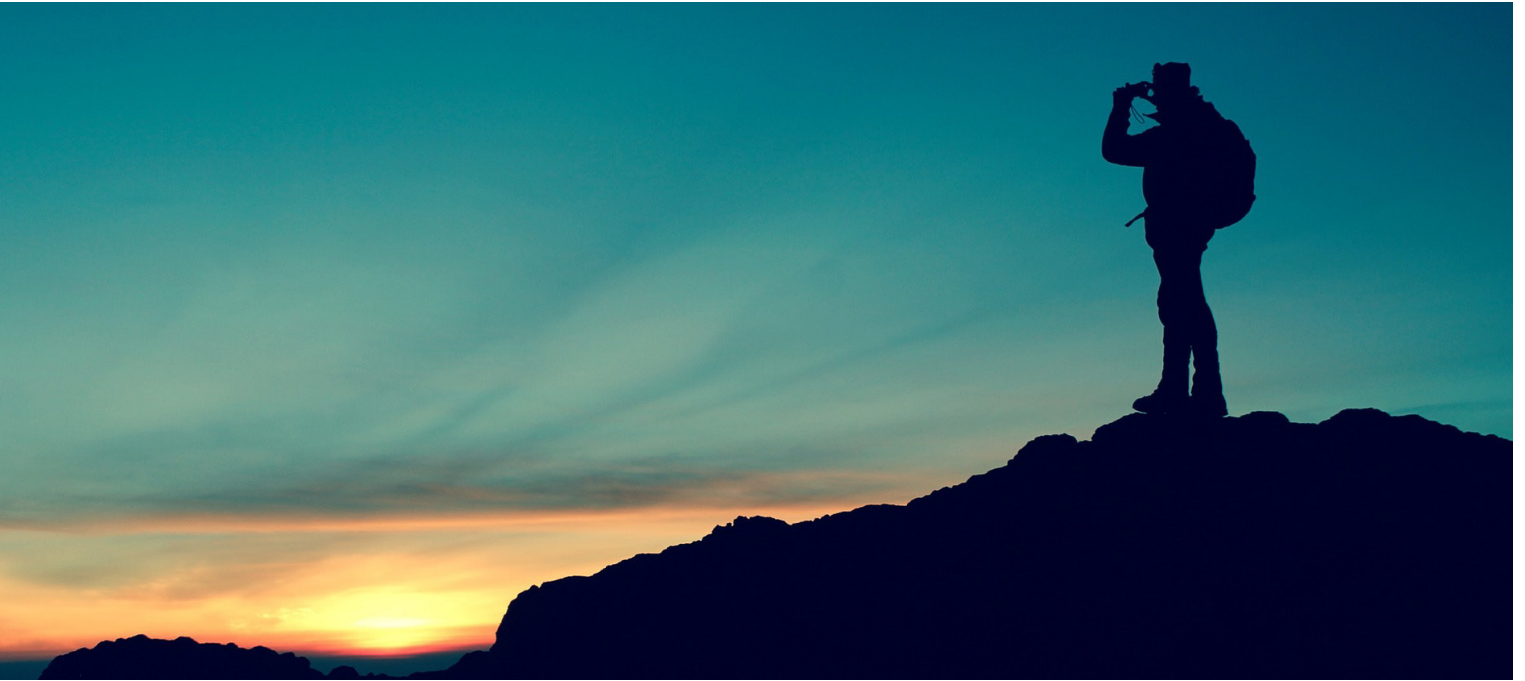
Prior to his role, Luis was Draftsman at Sonnedix Japan K.K supporting the engineering department efforts from December 2016 to June 2017.

Luis, holds a Bachelor of Building Engineering from the University of Sevilla, Spain.

The background of the slide features a close-up of a person's hand holding a lit sparkler. The sparkler is emitting bright, golden sparks that are visible against a dark, out-of-focus background. A semi-transparent blue rectangular overlay covers the left and center portions of the image, providing a backdrop for the text. In the top-left corner, there are three parallel, diagonal orange lines.

# Company Values Statement





# Mission, Vision and **Values**

## MISSION

We at OnRenewables are passionate about our projects and we aim to contribute to the ongoing global efforts in the renewable energy sector by using practical, cost-effective and sustainable methods. We believe that by doing so, we will make a difference to preserve the environment.

## VISION

Our aim is to introduce OnRenewables as global leader in the engineering and project management services for the solar photovoltaic sector. We are inspired by the trust of our clients.



### **Professionalism**

Professionalism is the culmination of competence, knowledge, resourcefulness, quality, attitude, and cooperation related to how we provide our professional services. Our company strives to provide its clients with not only a superb service, but also with an exceptional experience over the entire course of a project. While it is important to be recognized for quality and knowledge, it is also essential to leave our clients with a positive view of our entire organization. Demonstration of a positive attitude, competence and cooperation on all levels creates an immeasurable positive impact when it comes to a client choosing to return to the firm or recommending our services to another potential client, thus leading to growth.



### **Integrity**

Integrity is having the courage to make the tough calls, taking pride in our work, being transparent and honest with our team, and being respectful of everyone.



### **Clarity**

Clarity, leverages internal and external resources, reduces conflict and stress, improves efficiency and greatly enhances people's ability to work together.



### **Commitment**

Commitment to our customers and our team means we are accountable, take ownership, model servant leadership, and operate with a sense of urgency.



# Sustainability

Running a business responsibly is key to its long-term sustainability: all decisions we make, whether regarding the governance and strategy of our company or about the planning, design and delivery of projects, have consequences for society. Sustainability – at the heart of corporate social responsibility (CSR) – helps us ensure that those consequences are positive, adding value for our clients and the communities we work in.

OnR approach to sustainability means taking on the responsibility to help better the environment by using our ingenuity and creative methods to reach our goal.



We are  
**OnRenewables**

We bring together professionals from diverse disciplines and with complementary skills, on a uniquely global scale.



A person wearing a blue long-sleeved shirt, a tan baseball cap, and a patterned neckerchief is working on a solar panel array. They are holding a tool, possibly a screwdriver, and are focused on the task. The background shows a clear blue sky and some greenery in the distance. The solar panels are blue with silver grid lines.

# Engineering Methodology and Technology

We solve our clients' problems with the most advance technology, methodology, and software that is available in the renewables market.

We deploy from software to analyse and design in 3D the civil works and module layout, to software to calculate the civil earthwork, drainage systems, racking system, plant performance and yield as well as sizing the equipment for complying with the interconnection requirements.

Below are some of the tools we use

AutoCAD Civil, PSS/E, Robot Structural Analysis, SAP 2000, PVSyst, Matlab/Simulink, CivilStorm, PondPack, FlowMaster, Battery Sizing Analysis, Network Analysis, Protective Device Coordination, DC Systems, Cable Systems, Ground Grid Systems, Dynamic & Transients, PV Array / Solar Panel, Cable Thermal Analysis, Power Monitoring & Simulation, Switching Sequence Management, etc.





# Project Management Approach

Getting things done on time, on budget and with the best quality is at the core of our project management.

OnR's project management is based on a pro-active approach. By storing, tracking and retrieving the information related to the tasks at hand we avoid delays and, cost overruns.

We provide "front-end" planning by thinking in advance, generating a series of actions which can later be undertaken without further planning.

# Office Locations

## MARBELLA

OnRenewables, S.L.  
5 Calle Juan de la Cierva  
(Floor # 1, Office # 6)  
29603 - Marbella  
Spain

## VALENCIA

OnRenewables, S.L.  
18 Calle Ingeniero  
Manuel Maese  
(Ground floor)  
46011 - Valencia  
Spain

## TOKYO











3-12-23-505  
Kamimeguro  
Meguro ku  
153-0051  
Tokyo. Japan











# General services provided

Nr.	Design Engineering	Owner's Engineering	Technical Consultation	Permitting and Business Support	EPC Management	On-Site Tests (separate quotation)
1	Cartography and mapping	Assistance in project tender processes	Red-flag memo (pre-due diligence)	Assistance in project evaluation	Site management	Geotechnical tests (e.g. boring, DPST, Swedish test)
2	Topographical survey and data processing	Assistance in EPC RFP processes	Technical due diligence	Assistance in project development	Selection of subcontractors	Material sample lab tests
3	Civil and drainage design	Bid comparison, contractor classification, recommendation for awarding	PPA and interconnection assessment	Permitting management	Site daily coordination and supervision	Compaction tests
4	Mechanical design	Preparation of technical requirements for EPC Contracts	Market analysis	Securing project land and easements	Liaising with project manager and subcontractors	Racking system tests (pull out and horizontal traction test)
5	Electrical design	Assistance in EPC contract negotiations	Project feasibility studies	Securing point of interconnection and PPAs	Review and implement design and quality control on site	Racking system galvanization and corrosion test
6	Module and facility layouts	Engineering control and monitoring (EPC Contractor submittals review, comment and approval/rejection)	Environmental impact assessments	Securing tariff	Site report creation	Shading analysis
7	Transmission line design	Procurement analysis and selection including quality factory visits and vendor qualification	Site investigations and assessments reports	Obtain project environmental approval	Project Management	I-V Curve analysis
8	Energy yield assessment	Construction monitoring to ensure project is on budget, on time and with the expected quality	Site-specific solar resources studies	Obtain project construction and operating permits	Liaising with the client, subcontractors and other stakeholders such as lenders, project owner, landowner, municipality, utilities, etc.	Electrical isolation cable tests
9	Cost and O&M optimization design	Commissioning assistance	Tariff, policy and regulatory studies	Facilitate and setting up client operations in specific-on-demand countries	Ensure project completion on budget, on time and with the highest quality standards	Module lab tests
10	Ultimate design for the highest project return	Assistance to punch list creation, follow up and closure	Quality and manufacturing audits		Find ways to proactive prevent and solve pro	Thermal analysis
11	Project cost budgeting	Assistance to project acceptance	Repowering assessment and engineering	Local partners and contractors search and selection for clients	Assessing and minimizing project risk	Drone surveys for marketing and site management purposes
12	Grid code compliance	O&M monitoring and supervision	Energy storage integration	Liaise with locals and clients	Create project status & progress reports	other...

# Which tasks do we consider for designing high performing PV Plants?

	<b>Consolidated cadastral maps</b>	>	Obtain single all cadastral maps of the project lands to consolidate it into one single project cadastral maps for defining the project boundary.
	<b>Topographical Data</b>	>	Obtain and integrate topographical data either via topographical onsite survey, aerial or satellite data into the project boundary to assess the actual terrain condition.
	<b>Actual terrain analysis</b>	>	Analyse actual terrain condition to determine useable space for panels placement with none or limited civil works considering the slope direction and inclination.
	<b>Final terrain analysis</b>	>	Determine the optimum final terrain shape to reduce earth work and maximize plant capacity and performance.
	<b>Cut and Fill Calculation</b>	>	Calculate cut and fill figures (cubic meters) to estimate earthwork cost.
	<b>Drainage system</b>	>	Determine and calculate the adequate drainage system elements such as retention ponds, ditches, manholes, etc.
	<b>Racking system</b>	>	Determine the optimum racking system configuration to maximize plant capacity and performance such as panels per table, landscape, portrait, tilted angle, mono-pole, bi-pole, etc.
	<b>Arrays distribution</b>	>	Place arrays considering the shadings as per customer preference and the terrain condition.
	<b>Module layout</b>	>	Obtain the optimum module layout maximizing plant capacity and performance.
	<b>Different racking configuration areas</b>	>	Determine areas with special racking system configuration due to the different soil conditions (more slope, different foundation, azimuth, etc.

	<b>Internal shadow control (I)</b>	>	Calculate real near shadow losses due to the arrays themselves on the layout.
	<b>Internal shadow control (II)</b>	>	Calculate real near shadow losses due to internal elements such as inverter stations and houses on the layout.
	<b>External shadow control</b>	>	Calculate real far shadow losses such as external trees and mountains.
	<b>Performance and yield report</b>	>	With the final layout calculate the plant performance and yield.
	<b>String connection</b>	>	Define the cabling configuration for the string.
	<b>Inverter placement and cabling</b>	>	Define the right location and optimum cabling for the inverters and transformers stations.
	<b>Trenches layout</b>	>	Define the trenches layout and cabling length.
	<b>Trenches type</b>	>	Define the cable trenches types with the layout.

 onrenewables

 @on\_renewables

 onrenewables

 **onrenewables.es**