

June 2021

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Dear Reader

We are pleased to present you the seventh Solenco Power Newsletter from June 2021.

With the project's Newsletter you receive the latest information about the European Project SOLENCO and its main objective "The Solenco Powerbox", Manufacturing and Commercial roll-out.

Further, we will keep you up to date about the Project Activities and initiatives related to Solenco.

In the seventh issue of Solenco Power's Newsletter, we will introduce the first version of our in house developed software, the Powerbox simulation tool.

For more information and news about Solenco, please visit our website:

https://www.solencopower.com/

We hope you will enjoy reading this seventh issue.

Your feedback and comments are always welcome!

Message from the President



During this April – May 2021 period, we reached satisfactory results in the implementation of a simulation tool for our Powerbox.

This python based scripting tool hosts the methods and processes applied in the Powerbox system.

From given inputs, the simulation tool will estimate what will be the evolution of the energy flows on the existing installation with and without the Powerbox.

With this tool, we will support all the requests and business opportunities.

<u>Title</u>

Solar Energy, 24 hours, even in winter. On or off-grid. Based on Hydrogen Technology

<u>Duration</u>

April 2020 - March 2022

Main objectives

Manufacturing and Commercialisation of Solenco Powerbox



The Solenco Project is funded by the European Union's Horizon 2020 research and innovation programme under grant agreement $N^{\circ}~946442$



"Do not go where the path of fossil fuels may lead, go instead where there is no patch and leave a TRIAL." Dr. Hugo Vandenborre Founder & CEO

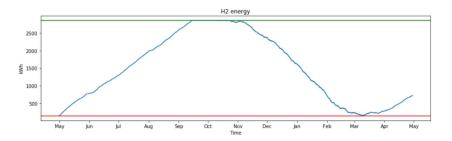
Solenco Powerbox: Simulation tool

In oder to process the increasing requests of Powerbox systems, Solenco's team has merged the operational logic of the reversible fuel cell process into a simulation tool.

With this python-based scripting tool we are able to plot the evolution of an installation over a desired period of time. Installation normally combining renewable production, loads and the Powerbox as the storage solution.

Each installation will be virtually generated with the inputs provided by users requesting a Powerbox. The values to create this installation are the electrical and thermal demand of the installation (ideally for a period of one year). If this information wouldn't be available (e.g. new construction), Solenco's team has generated standard user profiles.

By using the simulation tool, these inputs and profiles will interact with the working principle and operational logic of the Powerbox, determining when storage and self-consumption will occur.



The simulation tool will moreover allow the visualization of the breakdown of these energy flows in a daily and monthly period.

Upcoming Initiatives

In the next Newsletter further details regarding a technological publication for a global conference will be disclosed.

