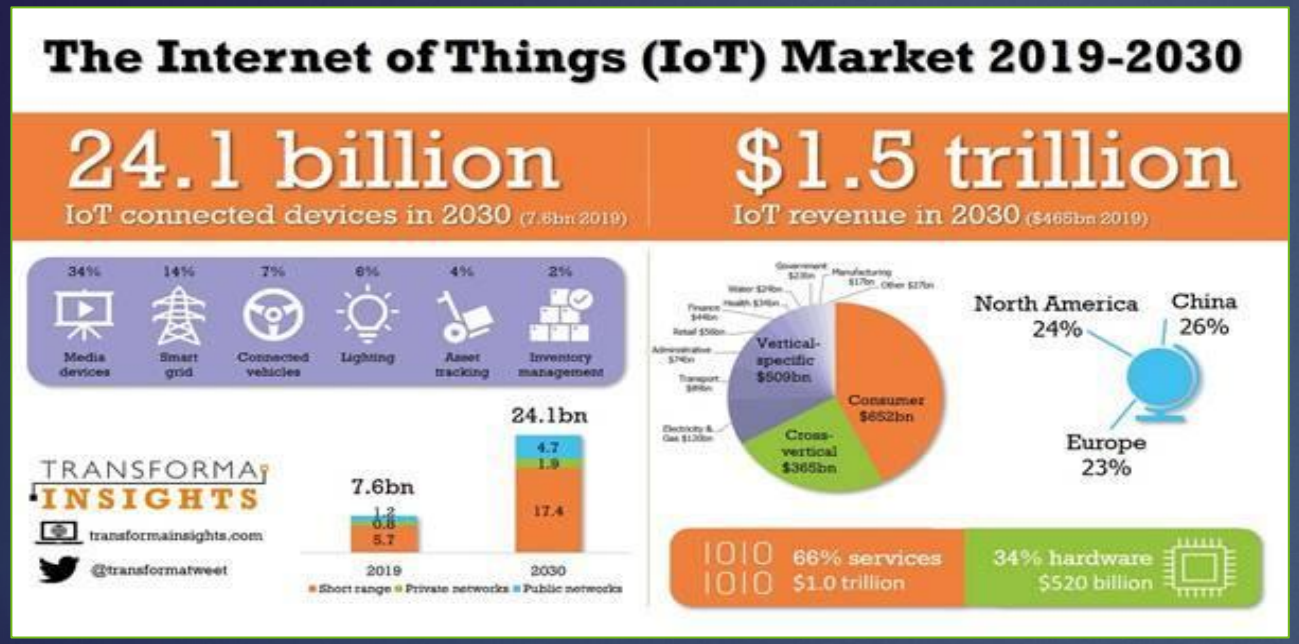
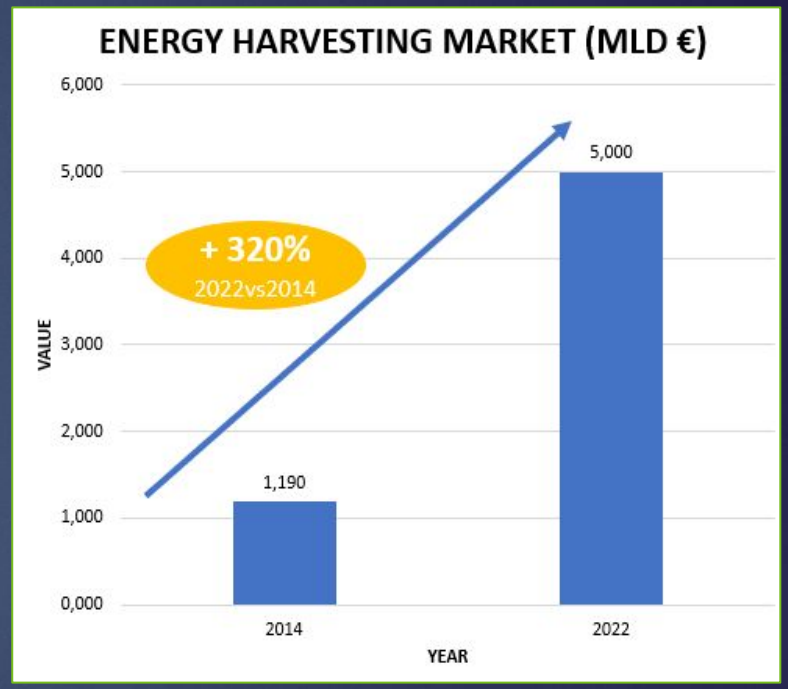
Volta Plant

# GREEN ENERGY FOR A BETTER FUTURE

www.voltaplant.com

# Potential Market



# Ou Mission and Vision

## Mission

- Contribute to the innovation system through technologies

## Vision

- International leader in matching innovative technologies and nature in the fields of IoT, smart agriculture and green energy.
- Strategic partner for professional investors, corporate VCs, Open Innovation managers, proposal coordinators, Policy Makers – e.g. on the subject of Carbon Offset

# Our Technology

*VOLTAPLANT it's owner of* an internationally patented technology based on microbial fuel cells that produces clean energy from plants.

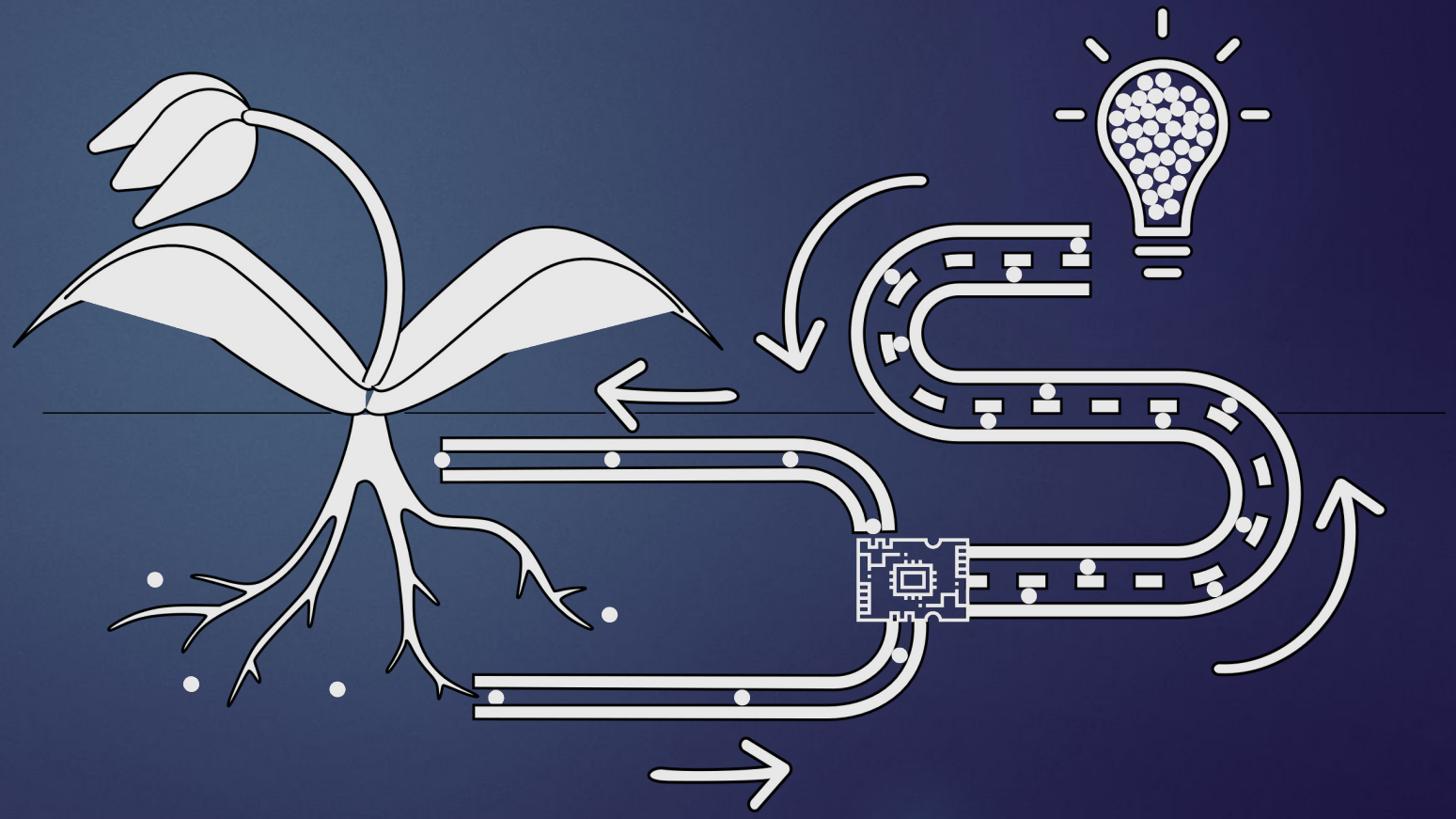
**Plant**

**+**

**Voltaplant System**

**=**

**Clean energy**



# Our Green Power Supply

*VOLTAPLANT* guarantees an inexhaustible source of renewable and sustainable electricity, able to power sensors, devices and low consumption LEDs, continuously and without the use of batteries or photovoltaic panels.

- ***100%*** *natural and renewable energy*
- ***Not dependent by*** *wind* ***and*** *sunlight*
- ***Easy*** *disposal*
- ***No recurring*** *costs*

# Our Patent And Our Know How

***Our* Patent:**

- ITA Application number: 102019000024643 - “Un Dispositivo e un metodo per la generazione di emergia elettrica dalla degradazione del suolo“
- EU Application number: EP20215777.2 - EU "A device and a method for generating elettrical energy from soil degradation”
- International Extension application number: PCT/NL2008/050219 – “Device and method for converting light energy into elettrical energy" - [International Publication number: WO 2008/127109 (23.10.2008 Gazette 2008/43)]Our Know How

**Our Know How**

- 54 chapters of books
- 154 scientific articles
- 330 interventions at conferences and seminars
- 159 theses followed
- 18 patents filed

# Our Pipeline Of Solutions And Fields Of Application

## Products and Services

- Temperature and humidity sensor power supply
- Sensors, devices and low consumption LEDs power supply
- Internet of Things and Smart Cities: Sensor and device power supply
- High Level Consultancy

## Field Of Application

- Internet of Plants and Smart Agricolture: sensor and device power supply
- Gardening and outdoor lighting
- Interior furnishings and outfittings

# Our Solutions – Standard System (1/2)



- *Temperature and humidity sensor power supply*

# Our Solutions – Standard System (2/2)

- Sensors, devices and low consumption LEDs power supply

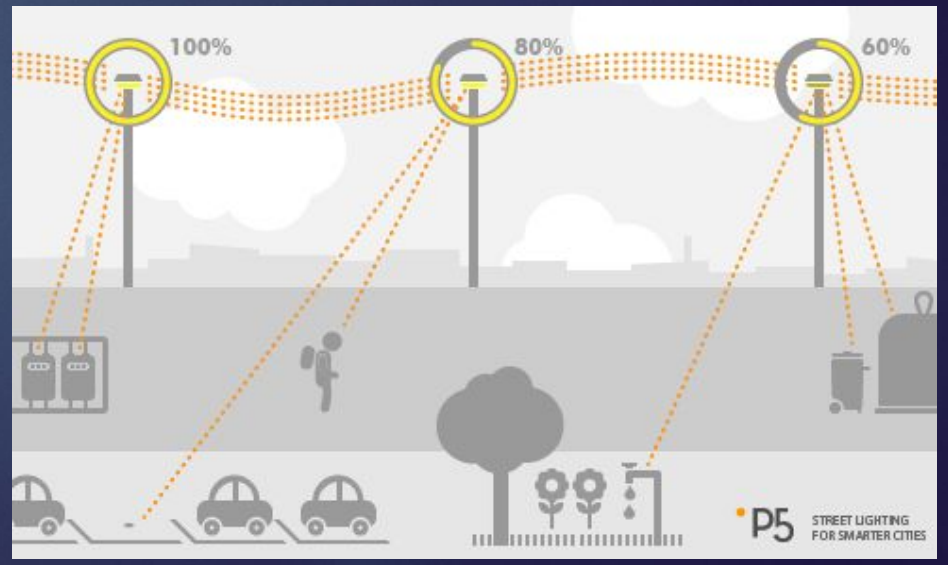
# Our Services: High Level Consultancy

The skills of the *VOLTAPLANT* research team, which are rooted in years of studies and publications, allow us to provide high-level consultancy in the field of environmental botany and discrete and integrated electronics:

- *Development of new projects based on Customer Specific Requirements*
- *Activation of University researches and Thesis on specific topics requested by the client*
- *Development of new tailor made "green" Products*

# Our Field of Application (1/3)


- *Internet of Things* and *Smart Cities*: Sensor and device power supply



# Our Field of Application (2/3)

- *Internet of Plants* and *Smart Agricolture*:
  *Sensor and device power supply*

# Our Field of Application (3/3)

- *Gardening and outdoor lighting*

- *Interior furnishings and outfittings*

# Our Tailor Made System

The VOLTAPLANT System is easily customizable according to the specific needs of the customer in order to:

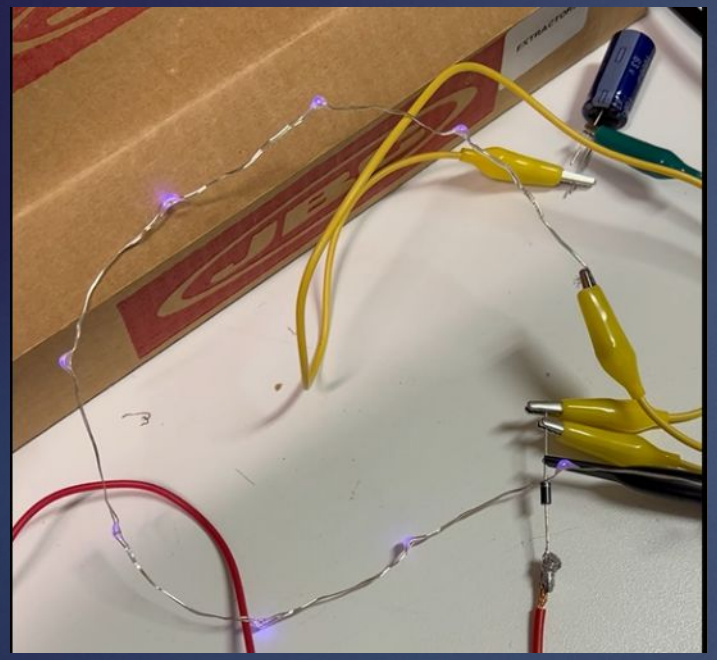
- *Power different types of utilities and applications*
- *To be used in any sector*

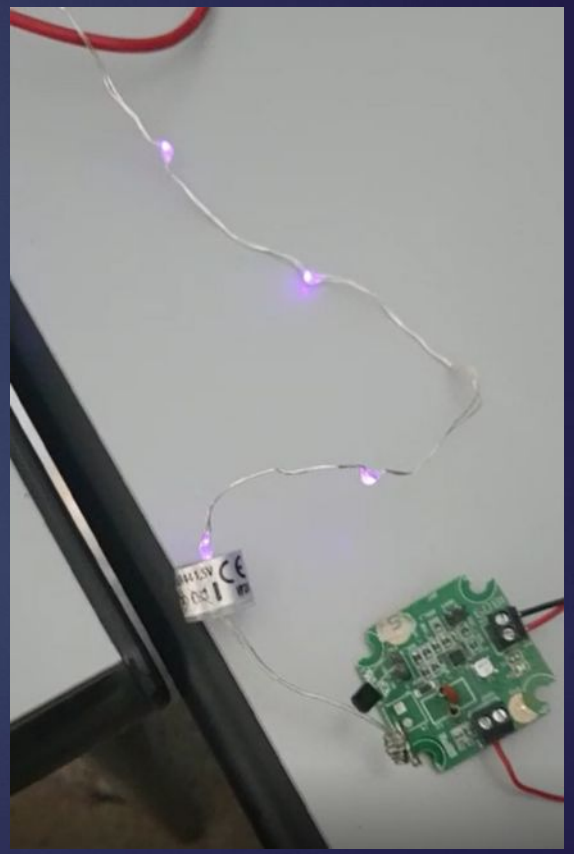
# Our Research Results (up to FEB 2022)
## (1/3)

During last year (up to FEB 2022) of intensive applied research:

- *A new prototype of PMFC module has been developed*
- *The power extracted from a single cell has been raised by 300%*
- *A sensor for temperature and RH measure could be supplied perpetually*
- *An array of low power led stripe could be supplied with 1 single cell (blinking)*
- *An array of low power led stripe could be supplied with 3 cells (always ON!!)*
- *Optimal interconnection of several PMFCs is currently under study*

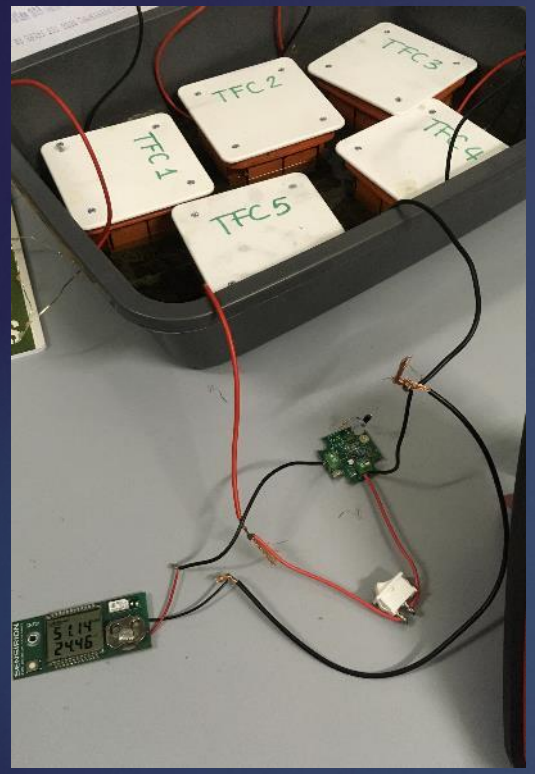
# Our Research Results (up to FEB 2022)
*(2/3)*

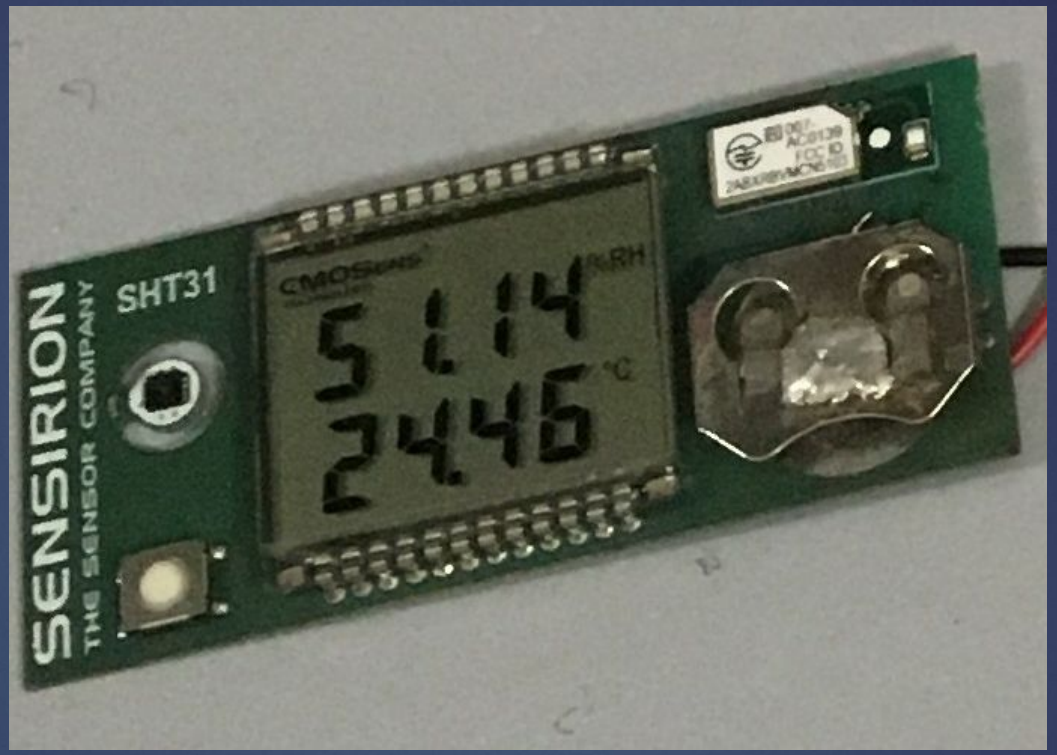




**A single PMFC can light up a complete low power LED stripe**

# Our Research Results (up to FEB 2022)
## (3/3)




**A single PMFC can supply a temperature and humidity sensor perpetualy**

Subsequent steps have been generated and consolidated until October 2022 and are provided on a private treaty basis due to the important new features that need to be protected

# Our Benefits For Companies
# Our sustainability Goals

Our Professionals in Costing, Finance & Tributes have the opportunity to drive companies investing in *VOLTAPLANT* to:

- *Incentives and tax advantages*
- *Accounting Incentives*
- *B-Corp Certification*

Our Goals

- 7 - Affordable and Clean Energy
- 9 - Industry, Innovation and Infrastructure
- 11 - Sustainable cities and communities
- 13 – Climate Action

# Our TEAM

*VOLTAPLANT* is a spin-off of the University of Pavia composed of a Team of Professors and Researchers supported by a Specialized Management:

- Department of Earth and Environmental Sciences
- Department of Industrial and Information Engineering
- Professionals in Company Law, Tax & Finance, Sales & Marketing

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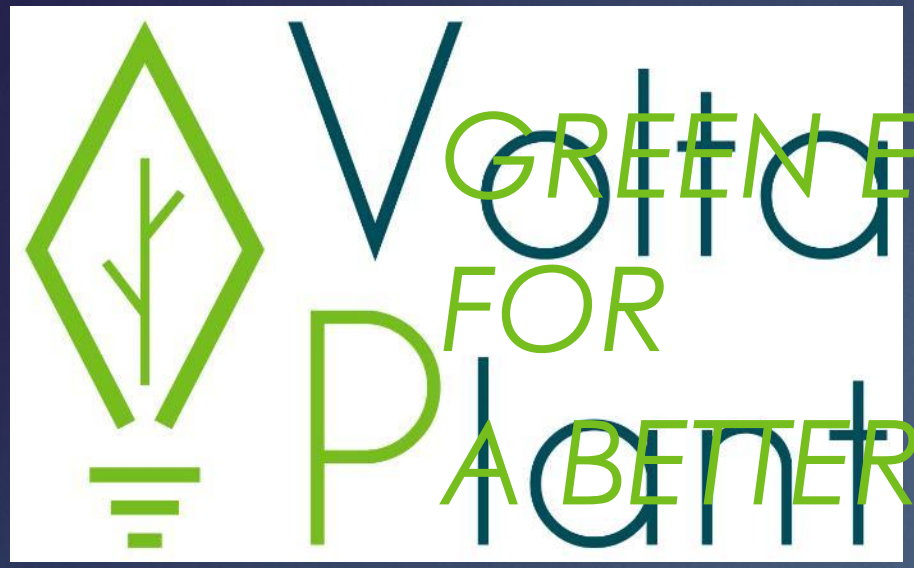
*If you wish to receive a Paper with the data of our Research, please send an email to*

***info@voltaplant.com***

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# THANK YOU FOR YOUR ATTENTION