

PLATIO SOLAR PAVER SMART CITY BROCHURE





ABOUT US

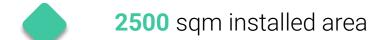
PLATIO Solar is a Hungary-based green tech company focusing on creating sustainable building materials: the solar pavers.

PLATIO's solar pavement is an innovative, **double green** building material, that not only generates clean energy, but it is also **environmentally friendly** as its base is made of recycled plastic.

PLATIO design paving solution makes solar technology part of the modern architecture. It provides new **clean energy** source for homes, green companies or smart cities and even offers e-mobility solutions.

OUR RESULTS







37 country representation

30+ international projects

CE product certification

ISO 9001 certification





PLASTIC COMPOSITE MATERIAL

WASTE BECOMES VALUE

Effective recycling: Plastic waste is reused as durable building material in the modular base parts of PLATIO Solar pavers.

Durable material: The composite material in PLATIO Solar pavers have similar life-span than concrete.





WALKABLE SOLAR MODULE

Solar cells

High-performance photovoltaic cells collect the energy of solar irradiance on the level of pavement



Glass tiles

Highly solid, tempered, scratch resistant and slip-proof hardened glass tiles protect the cells

Frame with recycled materials

Recycled plastic waste makes up the frame.

Durable structure, similar lifespan as concrete

Modular system

Modular units interlock together creating a solar surface.

Built in wiring: no convoluted complex external cabeling needed

Custom design

PLATIO solar pavers come with two types of glass (Clear and Opal) and two different high performance solar cells (monocrystalline and polycrystalline)

Both glasses are tempered and have anti-slip surfaces. solar cells are available in Ocean blue and Midnight black colours







PRODUCT BENEFITS

A space-saving solution

 Solar technology becomes part of the built environment without taking up valuable space

Recycled materials

- PLATIO contributes to creating a sustainable living environment and a greener future.
- To obtain value from waste, the frame of the PLATIO pavers is made of recycled plastic waste.

Visibly green, aesthetic design

- PLATIO improves the public image of your business and supports green CSR goals.
- Solar pavements transforms any building into a landmark of architecture and sustainability.

Low operational complexity

• Simpler maintenance compared to regular roofmounted solar panels.



PRODUCT MAIN FEATURES

Shock-protection

- Safe for pedestrians
- Low voltage system, SELV
- IP69+ certificated connectors

Heat absorption

- Low heat conduction, polymer coating
- Heats up like concrete surface

Slip-protection

- DIN-certified: R11, R12 and R13 level (DIN 51130)
- Special coating prevents slipping in all weather conditions
- Roughest coating suitable for bike path

Weatherproof system

- IP68 wiring system: 100% weatherproof
- Low degree of thermal expansion



Cars &heavy vehicles

- Primarily designed for pedestrian areas
- Withstands the weight of cars up to 2 tons

Vandal resistance

 Hardened glass, better impactresistance than regular pavers

In case of breakage, still suitable for walking

Easy to clean

- Broom
- Pressure wash
- Floor squeezgee
- Snow shovel in winter



SUSTAINABILITY

CIRCULAR ECONOMY

- We apply the circular economy approach at all points of production
- The product is 95% recyclable at the end of its life cycle
- During the supply of raw materials, we use wooden containers which are suitable for storing, shipping and multiple reuse.

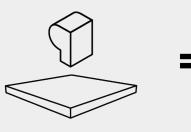


RECYCLING

- We obtain value from waste, PLATIO's base is made of hard to recycle plastic waste
- PLATIO contributes to creating a sustainable living environment and a greener future.

SUSTAINABILITY

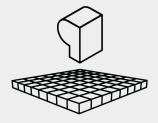
- PLATIO generates renewable energy
- Reduces the global greenhouse gas emissions
- Uses valuable space while producing green energy
- Solution for Net Zero Energy building.



1 m² PLATIO solar pavement



Plastic recycled equivalent to 400 PET bottles



20 m² PLATIO solar pavement



Yearly average electric energy need of a household





SOLUTIONS







GREEN COMPANIES SMART CITY





E-MOBILITY

A NEW SOURCE OF CLEAN ENERGY



POWER ANYWHERE







APPLICATION POSSIBILITIES FOR SMART CITIES



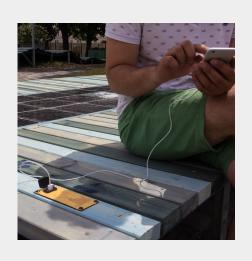
CITY LIGHTS



BICYCLE / ROLLER CHARGERS



PONTOONS



MOBILE CHARGERS

A NEW SOURCE OF CLEAN ENERGY



OTHER APPLICATION POSSIBILITIES FOR SMART CITIES

PLATIO ON-GRID SOLUTION CAN GENERATE GREEN ENERGY FOR OTHER SMART CITY TOOLS:

- SMART LIGHTING (energy efficient LED lamps)
- FREE WIFI FOR TOURISTS
- ENVIRONMENTAL SENSORS (measuring humidity, rainfall, CO2 levels, temperature or noise levels)
- SMART PARKING (indicating available parking spaces)



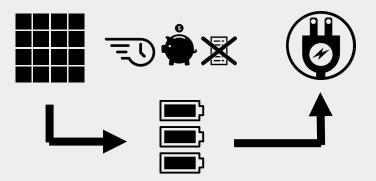
SMART CITY SYSTEMS

DEVICES NEED POWER SOURCES



Grid construction is expensive and complicated, and devices with high energy demand cannot be powered with regular PVs either.

When deploying smart city devices in urban areas, city planners have to face the problem of expensive, time-consuming and bureaucratically complicated process of power grid constructions. Locally produced electricity could be a solution, but regular solar panels can not provide enough energy, as their effectiveness is limited by their size.



The Platio Solar Pavement is a cost-effective, instant and independent power source for mobile chargers, lighting or digital signages.

By integrating Platio Solar Pavers into the area of the device, and putting a battery pack between them, Platio can provide a smart way to provide sufficient clean energy to operate devices where no grid is available. Unlike regular solar panels, Platio Solar Pavers can provide larger scale energy production for advanced devices.



SMART CITY SYSTEM







BETTER URBAN ENVIRONMENT WITH PLATIO

Our off-grid solutions generate power for:

- Mobile chargers and power sources integrated into outdoor furniture
- Digital smart city devices: digital signages, info kiosks & info totems
- Streetlights, outdoor lighting & other small energy consumption devices





REFERENCE: BARCELONA, SPAIN

Size: 56 sqm

Performance: 9 kWp

Client: Barcelona City Council

In 2021, one of our most impressive public installation was commissioned by the Barcelona City Council to place 56m2 of PLATIO solar pavement in the Glòries park, where an electric bike charging station is powered by PLATIO. This off-grid solution will help the city in its attempt of becoming carbon neutral.





REFERENCE: KALKARA, MALTA

Size: 25 sqm

Performance: 4,1 kWp

Client: Municipality of Kalkara

In 2022, with the help of PLATIO pavers, the first carbon-neutral park opened in Malta. The Rinella park in Kalkara is unique because the energy supply is fully covered by renewable energy sources. The 25 sqm long PLATIO solar pavement generates electricity for the lighting and irrigation system of the park. The Eco project was carried out by the local municipality, the Ministry of Environment of Malta with Alternative Energies Ltd.





REFERENCE: GRÖNINGEN, NETHERLANDS

Size: 325 sqm

Performance: 52 kWp

Client: Municipality of Gröningen

In cooperation with European Union, 'Making Cities' project, we built a solar pathway in the city of Gröningen as the first lighthouse net-zero pilot. We laid 325 sqm of PLATIO solar pavement on the bank of the river, providing electricity to the local community and municipality buildings. With this carbon-neutral project, they aim at creating Positive Energy Districts (PEGs) to react to the climate crisis and enhance urban liveability for all.

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REFERENCE: BUDAPEST, HUNGARY

Size: 2.7 sqm

Performance: 0.44 kWp

Client: Graphisoft Park

In 2021, 21 pcs of PLATIO Solar Pavers have been installed at the garden of the Head Office of Graphisoft Park. This PLATIO surface supply electricity for a robotic lawn mower.





REFERENCE: BUDAPEST, HUNGARY

Size: 2.7 sqm

Performance: 0.44 kWp

Client: Market Zrt.

In 2021, 21 pcs of PLATIO Solar Pavers have been installed at the garden of the Head Office of Market Zrt. This PLATIO surface supply electricity for a robotic lawn mower.





REFERENCE: Cham, Switzerland

Size: 10 sqm

Performance: 1.64 kWp

Client: Municipality of Cham, Faboro

We created Switzerland's first solar bike path in the town of Cham. PLATIO solar pavers were installed on an urban cycle and pedestrian path. The off-grid solar system supplies energy to the electric bike charger next to the road, the unused energy is fed to the nearby school building.

PLATIO



REFERENCE: GOTHENBURG, SWEDEN

Size: 4.86 sqm

Performance: 0.76 kWp

Client: SF Marina System

In 2017 Swedish marina engineer company, SF Marina System AB partnered with PLATIO to develop the first solar pontoon.





REFERENCE: BUDAPEST, HUNGARY

Size: 2.312 sqm

Performance: 0.43 kWp

Client: City of Budapest

In 2019, a 2.3 m2 solar pavement was installed in the city center of Budapest, Hungary. The solar paving system powers a citylight poster independently from the grid.





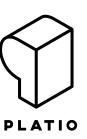
REFERENCE: BUDAPEST, HUNGARY

Size: 3.01 sqm

Performance: 0.47 kWp

Client: Budapest City

In 2017, a 3.01 m2 large system was installed in a Pop-Up park in the city center of Budapest, Hungary. We integrated PLATIO solar modules in the surfaces of outdoor furniture to provide off-grid power sources for mobile devices.





REFERENCE: GÁRDONY, HUNGARY

Size: 120 sqm

Performance: 18.6 kWp

Client: Magyar Közút Nonprofit Zrt.

In 2019, the first pilot project for building bicycle roads with PLATIO off-grid solution near the town Gárdony, in Western Hungary. The goal was to rebuild a busy asphalt bicycle road with photovoltaic solar tiles powering public lighting.





REFERENCE: TATA, HUNGARY

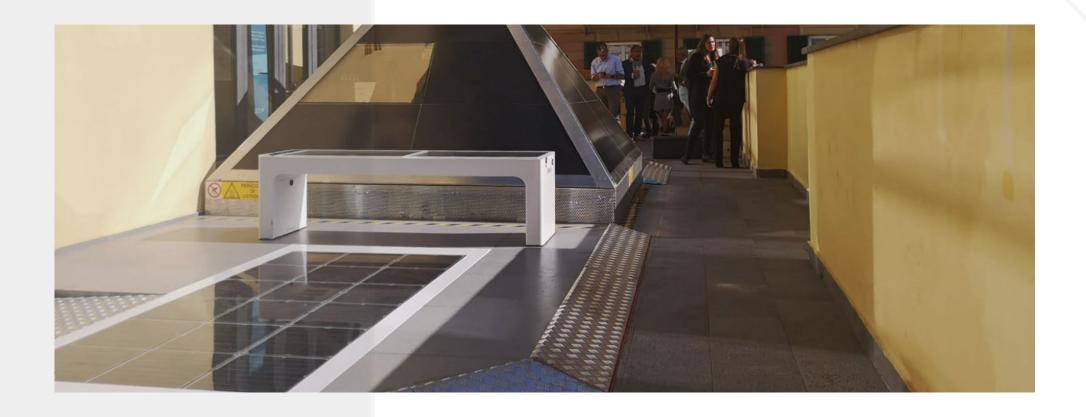
Size: 6.47 sqm

Performance: 1 kWp

Client: Spar Hungary

In 2019, we installed a 6.47m2 solar pavement in the environment of a Spar shopping-centre. The solar pavers power mobile charging stations equipped on benches near the playground.





REFERENCE: RAPALLO, ITALY

Size: 2.7 sqm

Performance: 0.38 kWp

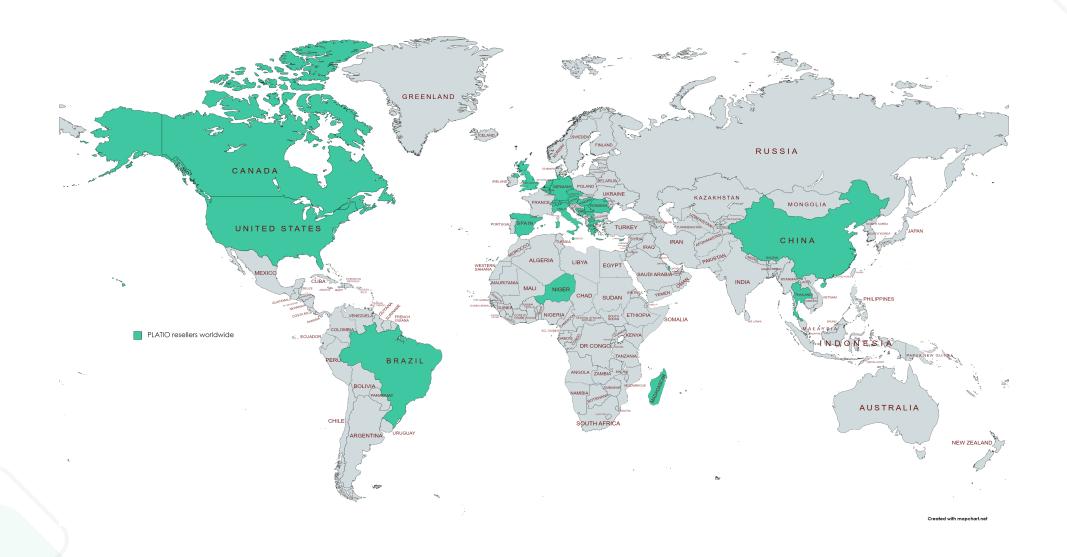
Client: Trenitalia

Since 2018, PLATIO's solar paver has been powering the rest area on the roof terrace of Rapallo railway station, where travelers can easily charge their phones at any time using the solar bench.





PLATIO RESELLERS WORLDWIDE









WALK WITH US, TALK WITH US

