



CHALKI



The local dimension

The design of the investment covers the energy needs (~1700MWh) of the local community

Based on:

- I. The Electricity consumptions of the inhabitants (592 customers)
- II. Local daily routes
- III. Characteristics of the local economy

We promoted:

- The construction of a Photovoltaic station of 1 MW
- 6 Electric vehicles for the local authorities
- 4 EV charging stations
- A smart lighting system
- A powerful 5G mobile network



Chalki's inhabitants, will be able to live in a green island, supported by today's technologies.

The business model & the role of the Energy Community



**1MW PV for
Virtual Net Metering
in Chalki**

“ChalkiON” is the 1st Energy Community owning a PV station in operation in a non-interconnected Greek island, with the participation of the local authorities
The local community is the owner of the project.

Virtual Net Metering is the most appropriate method for the members of the “ChalkiON” to offset the energy produced by the PV with the actual consumptions of their electricity bills.

The significant reduction of electricity bills

Κωδικός ηλεκτρονικής πληρωμής: RF6190773800 0300 0072 35783

Κωδικός ηλεκτρονικής πληρωμής: RF6190773800 2222 0082 35893

Εκκαθαριστικός λογαριασμός: *407,00€

Εκκαθαριστικός λογαριασμός: *157,88€

Χρεώσεις προμήθειας ΔΕΗ: 239,73€

Χρεώσεις προμήθειας ΔΕΗ: 5,83€

Category of consumer	Electricity supply charges before the offset	Electricity supply charges after the offset
Business	239,73€	2,38€
Household	234,32€	5,83€
Primary School	272,17€	2,36€

Electricity supply charges will reach almost to zero.

The inhabitants will pay **only** for the regulated charges

The competitive part of the bills will be funded **by the sun**



Chalki's project is a paradigm of 4D's

- ✓ **Decarbonization**
- ✓ **Decentralization**
- ✓ **Democratization**
- ✓ **Digitilization**

€ 1.5m

the total amount of the donation



The sponsors



purchased the electromechanical equipment of PV station and 4 EVs chargers.



developed the licensing, installed the PV station and improved the island's street lighting.



supported the twin transition of the island by providing digital technologies that bring new opportunities to the residents and the economy of Chalki (5G, public Wi-Fi, IoT, telemedicine, STEM)



donated 6 EVs to local authorities, 4 EVs by Citroen and 2 EVs by ALD



donated a solar-powered electric boat, built by a family-owned business in Patmos with a traditional Greek design





The national dimension

The GR-Eco Islands Initiative

The Greek islands in the route to go green & digital



1. Energy Production & Storage

Increase of RES utilization and development of hybrid energy systems with storage

2. Energy Efficiency

Targeted measures for the buildings focusing on tourist infrastructure

3. Promotion of e-mobility

EV adoption on the islands ' vehicle rentals business and the public transport within the next 6-10 years

4. Digital Transformation of electricity networks

Roll out of smart meters and smart grids

5. Ports Infrastructure

Modernization and energy upgrade of existing ports

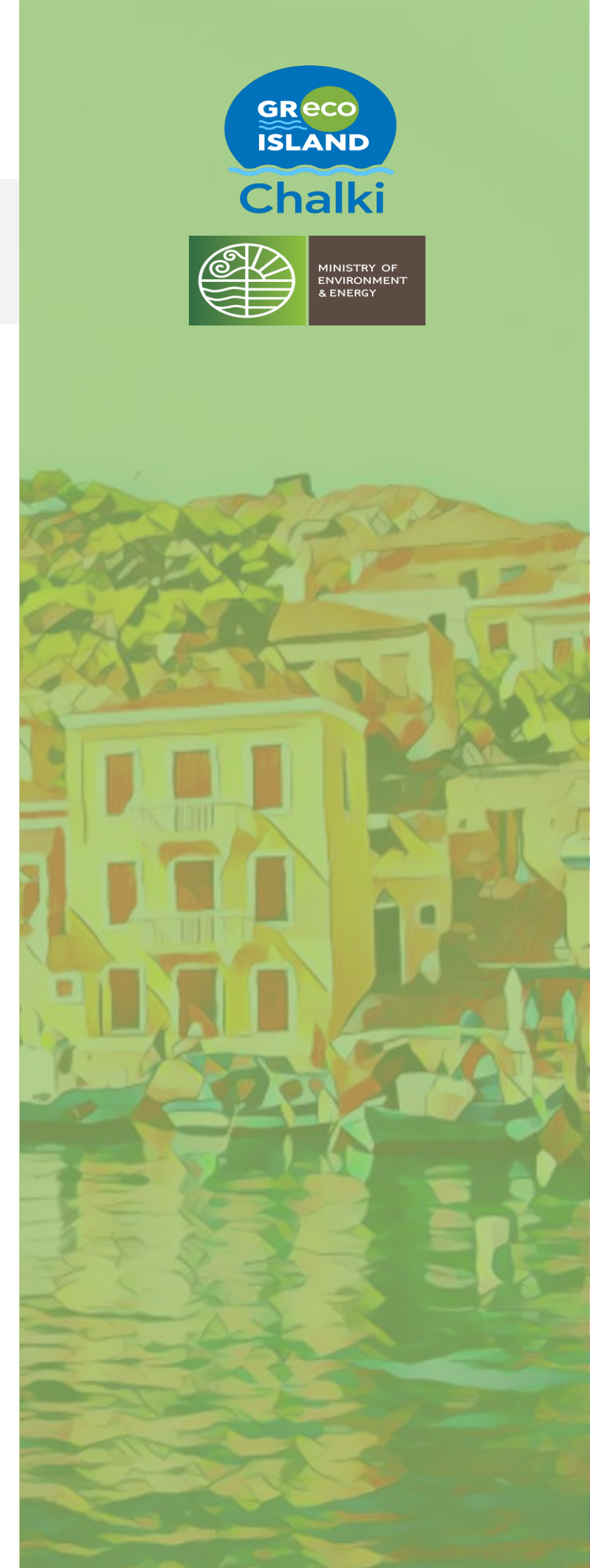
6. Telecommunications infrastructure

Promotion of Ultra fast broadband to digitalize the islands and host digital nomads

7. Circular economy

Waste management, water treatment and desalination plants

Goals



Replicating the Chalki project across the Greek seas, *will require cooperation and funding*

Cooperation



Funding Sources



Chalki is the testbed for the GRECO Islands Initiative



The European dimension

The European Union has set a goal of becoming a **net-zero economy**

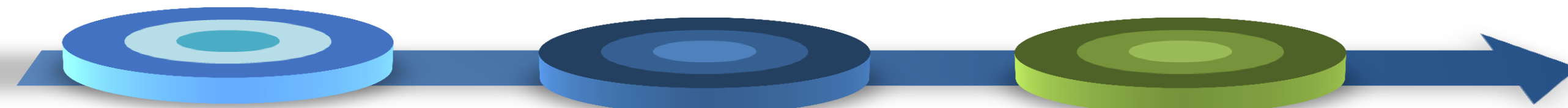


by 2050

The Union's goals

The Greek RRP

The GReco Islands



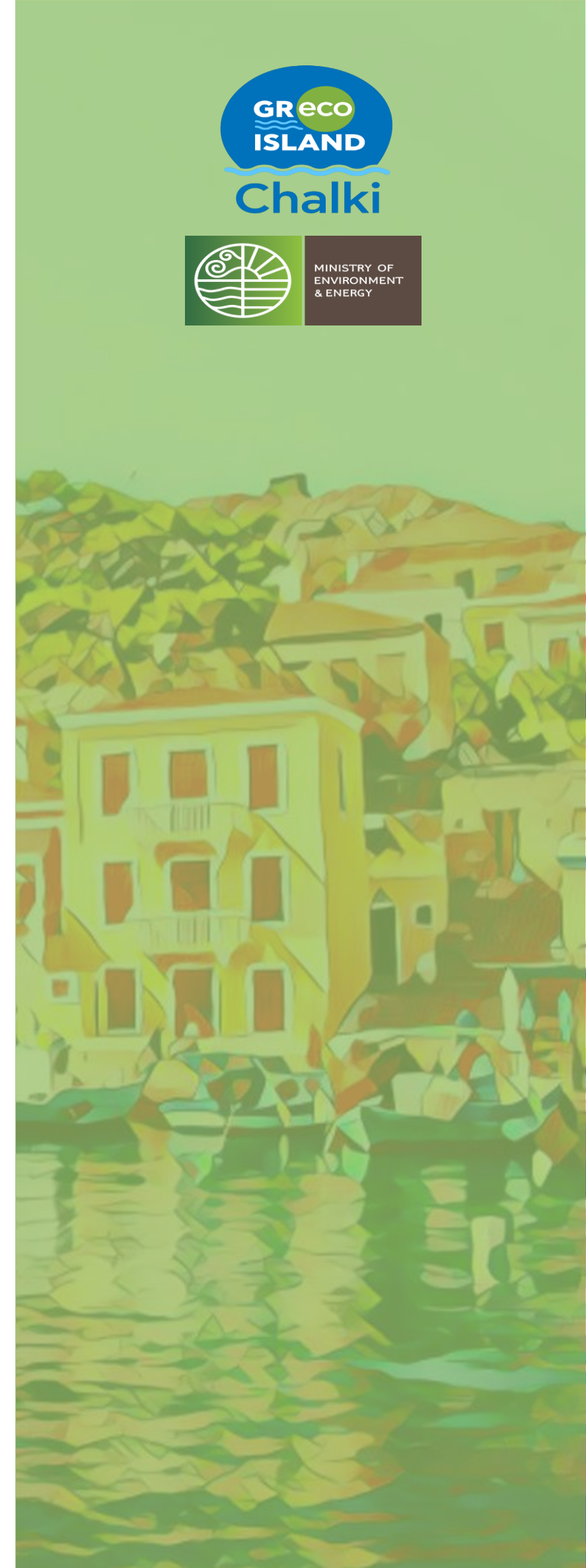
- are described in the block's Green Deal and
- are pursued by an array of policy schemes and programs

- aims to mobilize €10 bln at least towards the green energy sector

- will be a booster to the block's pathway towards net-zero
- will enhance the EU's Clean Energy for European Islands initiative



The **green** transition of the EU's islands is supported by the Commission





Chalki is just the beginning..!

