Super-Heero at Sustainable Places 9 Sep 2022 Welcome!

Human Energy Efficiency Retrontting Optimisation





Innovative EE Financing

"Innovative financing for EE investments: triggering action & unlocking social impact" office reaction in the end 2022 (Hybrid) https://www.common.com/

SUSTAINABLEPLACESEU



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A new way to connect to shoppers and build brand loyalty while saving energy and participating in the community







By making Energy Efficiency upgrades

Super-Heero: How we do that





And sharing the benefits with the shoppers and community via innovative financing schemes.

#HappyShoppers#EnergySavings#Climate#RenovtionWave#GreenDeal#ESG/#SDG







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We are a consortium of partners working together in a European Project on Innovative Financing for EE

We hope you follow us and become a Super-Heero!

Where are you from? What brought you to the workshop today? Contact us!

Super-HEERO project

SUPER-HEERO is a EU project financed by Horizon2020 under Societal Challenge Line "Secure, Clean & Efficient Energy"

SUPER-HEERO project aims to provide a replicable financial scheme for energy efficiency investments in small and medium-sized supermarkets, based on stakeholder and local community involvement

Energy Performance Contracts (EPCs) Product-service models for technology providers Crowdfunding/cooperative initiatives dedicated to local communities

WIN-WIN between supermarkets, customers, investors and EE professionals

The project was well received for its unique and innovative approach to linking loyalty programs and crowdfunding to EE measures for supermarkets



Questo progetto ha ricevuto finanziamenti dal programma di icerca e innovazione Horizon 2020 dell'Unione Europea ell'ambito della «Convenzione di sovvenzione»n. 894404 HUMAN-BASED

ENERGY EFFICIENCY

RETROFITTING

OPTIMISATION

Super-HEERO project

SUPER HEER

OBJECTIVES

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Develop and engineer an innovative scheme for energy efficiency investment in small and medium supermarkets based on stakeholder and community engagement.



Compile a portfolio of ad-hoc energy measures for supermarkets.

2

Implement innovative financial instruments for energy efficiency investments in two relevant pilot case studies.



Define a structured strategy and methodology for the replicability of the financial scheme at regional and national level.



Identify barriers and needs to support the development of regulatory and policy frameworks that allow the uptake of innovative financial schemes for energy efficiency investment. HUMAN-BASED

ENERGY EFFICIENCY

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Benefits for Stakeholders

- Financial support to implement EE strategies
- Reduction of liability and Technical risk
- Reduction of energy consumption and operating costs
- Alignment with UN SDGs

- Implementation of innovative business models (e.g., technology leasing and pay-peruse agreements)
- Creation of Case History and high potential for replicability



- Increased customer base through loyalty program
- Long-term business relationship through savings sharing schemes
- High potential for replicability

- Loyalty program
- Payback
- Reward strategies based on gamification
- Discounts applied to products and services
- Community engagement for local sustainable initiatives



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How it works: Super-Heero 5 Step Process

Discovery & Audits



Technical Design & Business Plan

3 Marketing & Advertising Campaign

Fundraising via the Crowd



The process adapts to:

- Supermarket Type
- Stakeholder Engaged
- Ownership structure



PROYECTO SUPER-HEERO

Supermarket Typologies



Urban Boutiques

Periphery medium size stores

Outer ring large stores

Old – Middle Age - New

Franchise Owned / Brand Owned / Co-Owned

Example #1: Brand Store (New or Retrofit)



What if? "DESPAR & IMOLA – Together for Sustainability 2022." PV Rooftop / PV Parking + EV Columns + EV Bike Point

Likely Characteristics:

- Money not needed
- Largely EE efficient
- Energy manager present
- Energy audit already on file
- Technology partnerships
 already in place



Example #1: Mechanism

Charging free with 50 euro of shopping.... Free coffee and brioche with...



win-win-win scenario There is an ROI – everyone has a financial return

Example #1: Benefits

Crowd investors are passionate / activists. Brand Loyalty effect is likely impactful

DESPAR:

- Brand and image sustainability and innovation (e-bikes = cool store)
- New relationship with existing clients (they feel part of the project)
- Mechanism to attract new clients (crowd investors will want to learn about DESPAR)
- Way to interact together on the territory with the comune

Shoppers, Staff and Crowd Investors:

- Investment opportunity (can't get 5% at the bank) and punti cuore
- Better shopping experience (shaded parking, EV points and a free coffee are nice)
- Opportunity to participate directly in sustainability

Community:

- Community project if present
- Education and actions on the territory in sustainability and the energy transition



Example #2: Existing Franchise Store



Likely Characteristics:

- Money for EE not available
- Not a new structure / inefficient
- No energy manager
- No energy audit
- No technology partnerships
- Likely not thinking every day about sustainability



Example #2:

Same core mechanism but:

- The crowd likely serves for cashflow
- More focus on store EE renovation (relamping, heat pumps, refrigeration, HVAC, PV, ...)
- More assistance is needed on energy auditing, intervention design, project implementation
- Perhaps less focus on marketing
- Perhaps less possibility to involved the community
- Still gains from activist crowdfunding investors who take interest in this particular store and brand
- Potential use of local incentives



Esempio #2: Benefits

DESPAR Brand:

- Third party to help sensibilize and engage franchise owners
- Franchise owners making sustainability actions in their stores with the brand

Franchise Owner:

- Access to financing without going to a bank
- Hands free EE retrofit experience
- New way to engage shoppers and store loyalty

Shoppers, Staff and Crowd Investors:

- Investment opportunity (can't get 5% at the bank) and punti cuore
- Better store / sustainability experience
- Opportunity to participate directly in sustainability

Result #2: Financial Scheme(s)



Result #2: Financial Scheme(s)



Intersection is most interesting

No unique solution

Every supermarket and community will have its own story

Incentives Hot & Cold / Sweet & Sour

Result #3: Roles & Contracting

Role	Description
Project Proponent	Project developer – signs contracts between all sides (supermarket – technology providers – crowd)
Project Owner	Either the Brand Owner or Franchise Owner
Brand Owner	Owns the brand
Franchise Owner	Owns the location business under the terms of the brand
Building Owner	Owns the building
Service & Product Suppliers	Works with proponent + owners to provide products and / or services
Super Heero Crowdlending Platform	Interface between Crowd and Proponent
Crowd investor (70%)	Participates in crowdlending campaign

Challenge – aligning all around common understanding Challenge – contract types Challenge – misperceptions of risk

Result #4: Crowdfunding Platform



White label vertical powered by partner Ener2Crowd

Ensures compliance & trust

Connects Super Heero and the supermarkets it works with to an already established community of wallets / activist investors

Automates all transactions between crowd and proponent

OUR PROJECTS

Find your community project and invest with us in your future.

REM. ACTIVE noturasi € 120.000 Padova Collected Lorem ipsum dolor sit amet, consectetur adipiscing elit Target € 200,000 Annual return 60% Max € 300,000 160 Duration of the investment 160 Days remaining 20/06/201 Fundraising deadline SOLUTION € 120.000 Marche Collected Lorem ipsum dolor sit amet, consectetur adipiscing elit. Target € 200,000 Annual return 60% Max € 300.000 Duration of the investment 160 Days remaining 20/06/201 Fundraising deadline

Result #4: Crowdfunding Platform



User experience for:

- Proponent
- Investor

Additional Results: Available at https://super-heero.eu/

- D1.1 ANALYSIS OF POLICY FRAMEWORK AND BARRIERS

D1.5 FISCAL AND LEGAL ASSESSMENTS OF THE SUPER-HEERO SCHEMES



D2.1 SUPER-HEERO RENOVATION MEASURE CATALOGUE FOR SUPERMARKETS

Inbound:

- Decision Support Tool on Business Planning
- Technology Partner Program
- Capacity building program
- Pilot Results

D2.2 GUIDELINES FOR THE IMPLEMENTATION AND FINANCING OF EE MEASURES IN SUPERMARKETS

D3.1 GUIDELINES FOR SUPERMARKET CUSTOMER AWARENESS-RAISING STRATEGIES IN ENERGY, ENVIRONMENTAL AND SOCIAL TOPICS



D3.2 - CUSTOMER REWARD AND LOYALTY PROGRAM DEFINITION

D3.3 REPORT ON ROUNDTABLE CONSULTATION FOR ADVERTISING CAMPAIGN

D4.6 ROADMAP FOR SUPER-HEERO TO CONTRIBUTE TO ACHIEVING THE EUS OBJECTIVES

Italian Pilots - Padova



I° Pilot

Actions in implementation 40 kWp to be installed



III° Pilot

Actions in implementation

- Replacing lamps with LED
- Replacing all refrigeration systems





II° Pilot Actions in implementation 30 kWp to be installed





Italian Pilots - Padova



Payback time of interventions

Measure	CAPEX €	savings €/y (2021 tariffs)	savings €/y (2022 tariffs)	PBT y (2021 tariffs)	PBT y (2022 tariffs)
PV	75.000€	8.640€	19.200 €	8,7	3,9
LED	11.150 €	1.314 €	2.921€	8,5	3,8
refrigeration	29.350€	1.080€	2.400 €	27,2	12,2
TOTAL	115.500 €	11.034 €	24.521 €	10,5	4,7









Spanish Pilots – Madrid-Granada





- The supermarkets audited were selected from a larger list based on the criteria of energy intensity and technical potential for improvement.
- Thanks to the different rounds of virtual, physical, and monitoring data collection, a remarkably high level of detail and accuracy was obtained in the study.
- The final reports produced are considered "investment grade", this means that they have the level of detail necessary for decision making.
- The installed Smart-meters will remain on the facilities and supermarkets will be able to make use of this equipment to continue measuring their consumption, if they wish to do so.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 894404

AUDITED SUPERMARKETS

DIA Almansa

Audit process



Address	Calle Almansa 75, Madrid
Built-up area	1.486 m ²
Types of energy supplies	Electricity
Annual energy consumption	413,822 kWh
Energy intensity	278.5 kWh/m ²

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DIA Arriaga



Address	Calle Santurce 2, Madrid
Built-up area	899 m ²
Types of energy supplies	Electricity
Annual energy consumption	327,761 kWh
Energy intensity	364.6 kWh/m ²

Humicum 2020 Exemption Univer Funding for Research & Immoration innov





AUDITED SUPERMARKETS

COVIRAN Virgen del Monte



Address	Calle Virgen del Monte 12, Granada
Built-up area	1.250 m ²
Types of energy supplies	Electricity
Annual energy consumption	354.196 kWh
Energy intensity	283,4 kWh/m ²



Proposed interventions



DIA Almansa

NO.	Description of the improvement	Savings			Investmen t	PRS	Emissions	VAN	Service life
		kWh / year	Total	€ / year	e	years	kg CO ₂ / year	€	years
M1	Monitoring system for consumption	20.691	5,00%	5.173	8.000	1,5	5.173	52.073	
M2	Use of condensation heat	11.555	2,79%	2.889	9.000	3,1	2.889	24.572	
М3	Installation of doors on open refrigerators	27.889	6,74%	6.972	12.506	1,8	6.972	255.807	
M4	Replacement of existing refrigerators	32.730	7,91%	8.183	29.200	3,6	8.183	285.763	
M5	Sectorisation of climate equipment	27.821	6,72%	6.955	8.250	1,2	6.955	72.510	
M6	Improved BMS system	13.910	3,36%	3.478	5.600	1,6	3.478	34.788	
M7	Installation of freecooling air conditioning units	25.402	6,14%	6.350	5.493	0,9	6.350	68.235	
M8	Air conditioning temperature setting	30.845	7,45%	7.711	0	0,0	7.711	296.681	
	TOTAL	185.279	44,8%	46.320	77.887	1,7	46.320	460.071	



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Proposed interventions



DIA Arriaga

NO.	Description of the improvement	Savings			Investmen t	PRS	Emissions	VAN	Service life
		kWh / year	Total	€ / year	€	years	kg CO ₂ / year	€	years
M1	Monitoring system for consumption	16.388	5,0%	4.097	9.000	2,2	4.097	38.593	
M2	Installation of freecooling air conditioning units	20.160	6,2%	5.040	10.000	2,0	5.040	48.542	
М3	Installation of doors on open refrigerators	31.536	9,6%	7.884	12.219	1,5	7.884	291.172	
M4	Replacement of existing refrigerators	19.000	5,8%	4.750	18.000	3,8	4.750	164.841	
M5	Improving roof insulation	11.880	3,6%	2.970	17.400	5,9	2.970	96.955	25
M6	Air conditioning temperature setting	3.312	1,0%	828	0	0,0	828	9.609	
M7	Rooftop photovoltaics	45.665	13,9%	11.416	40.000	3,5	11.416	399.430	25
	TOTAL	145.722	44,5%	36.431	106.389	2,9	36.431	316.938	



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We look forward to our first pilots on the crowdfunding program (case studies needed)

Capacity Building Program & Events

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