



The Rooftop Revolution

An alternative path towards decarbonization



BUSINESS AMBITION FOR

1.5°C



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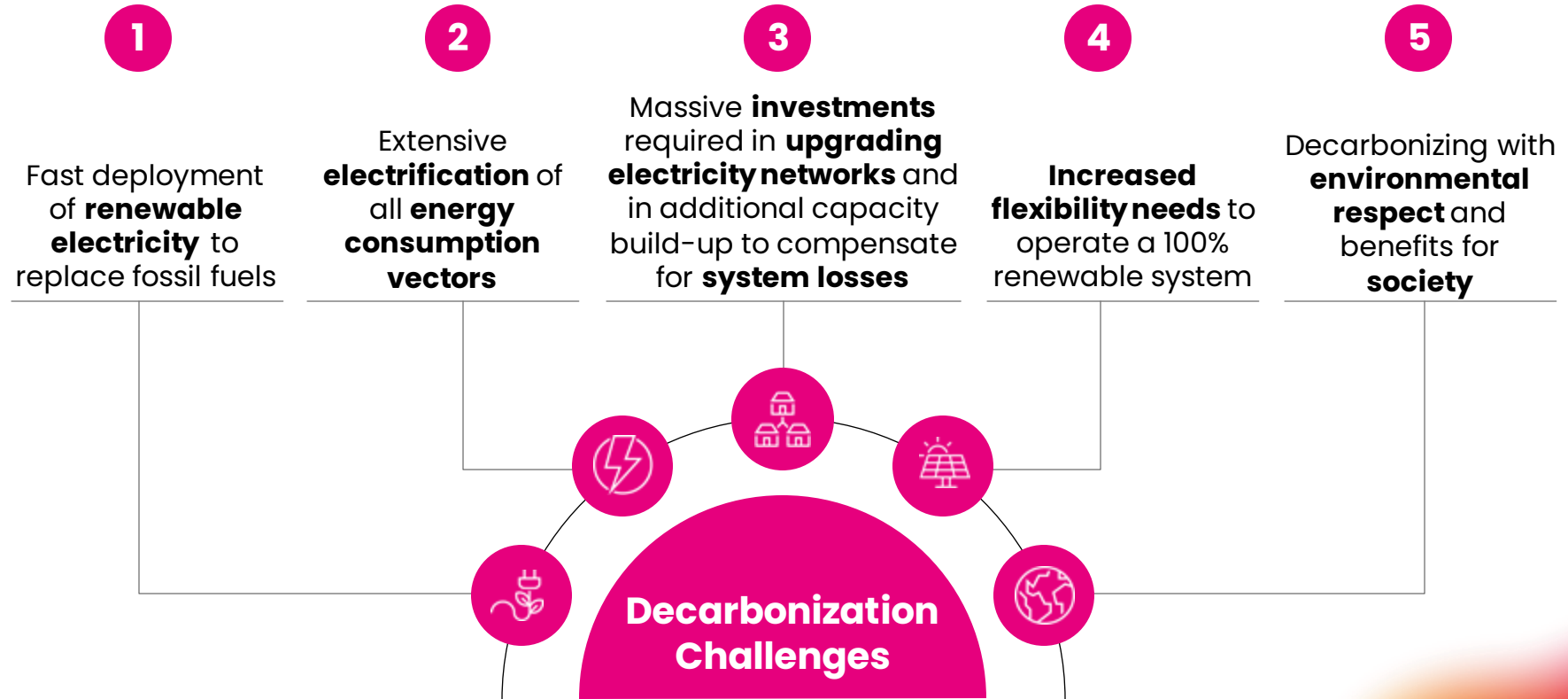
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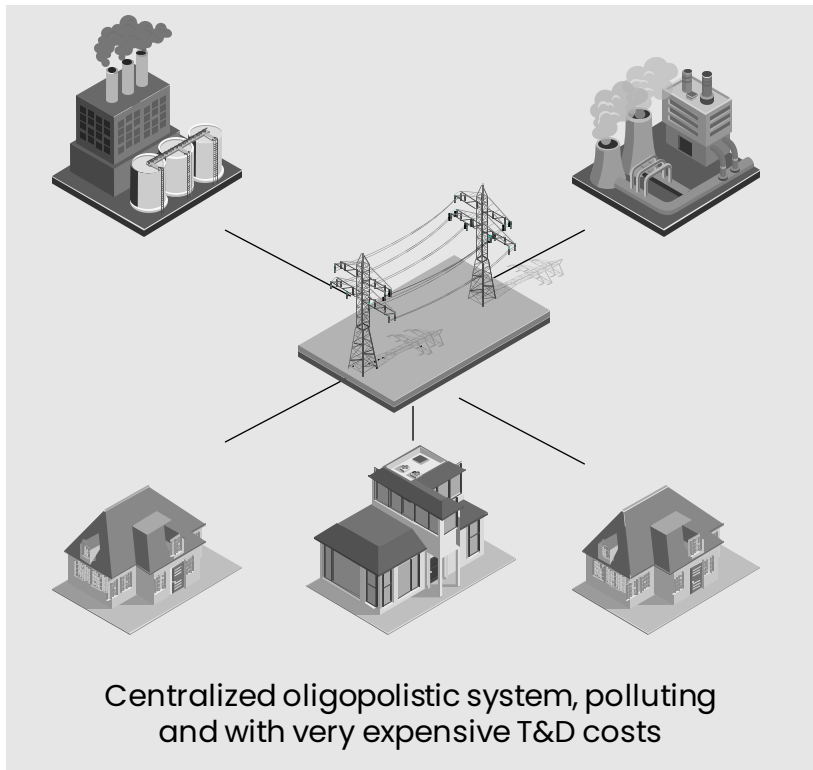
HOW HIGH
WILL INTEREST
RATES GO?

There are five major challenges associated to decarbonization

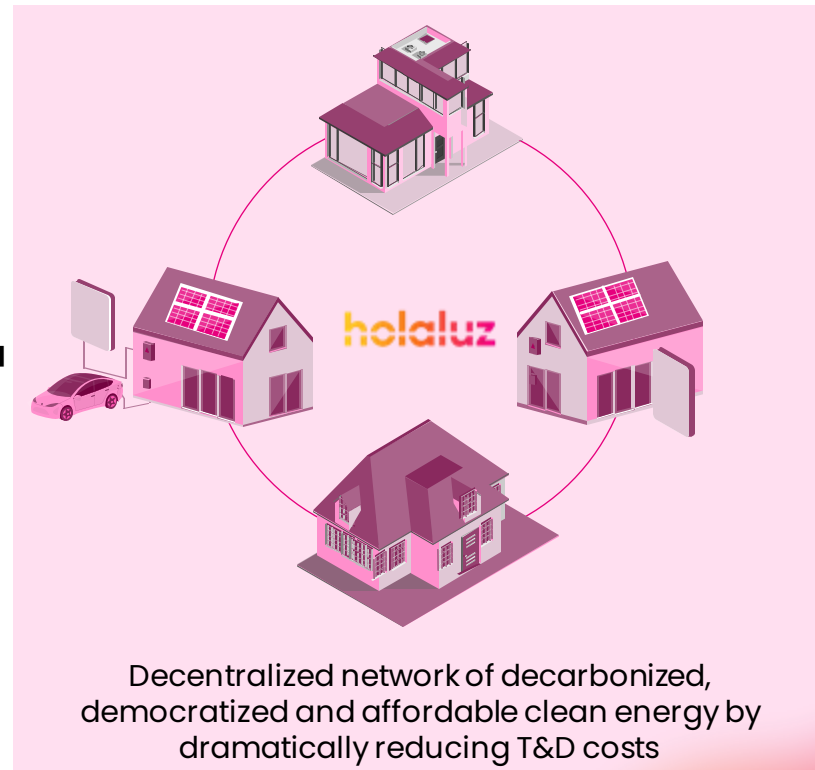


We need to transform the way we produce and consume electricity

Unleashing the full potential of electrifying energy demand by scaling distributed Solar and Storage



From
to

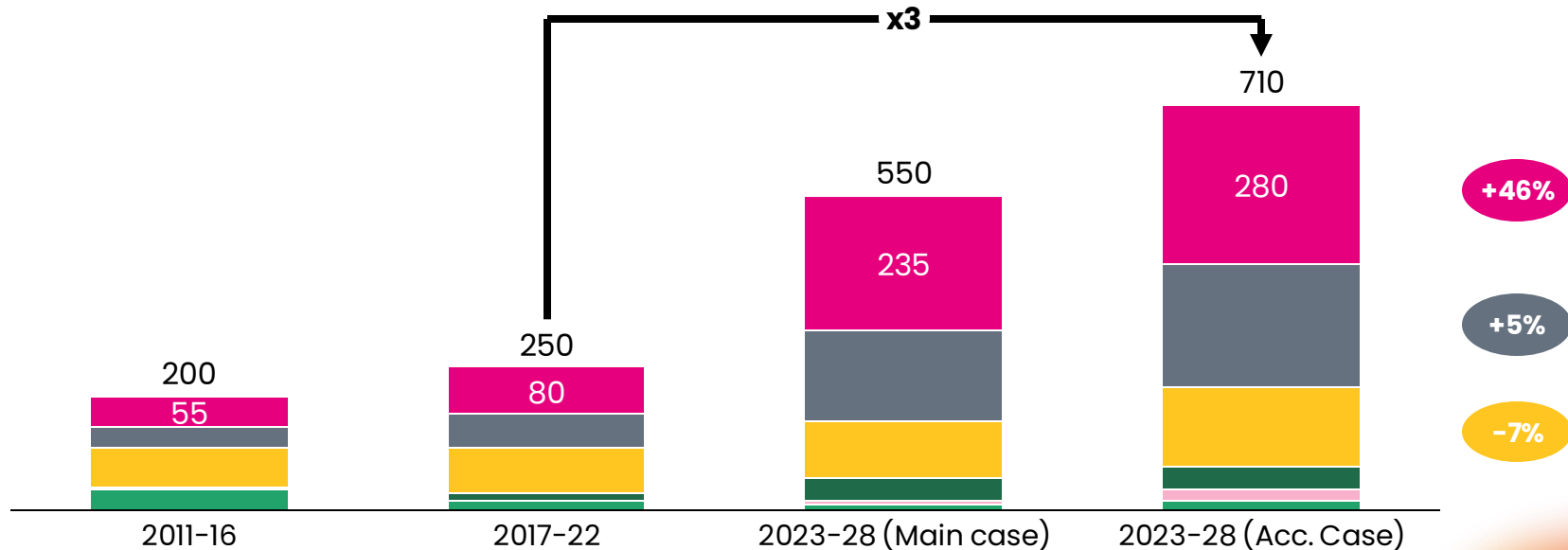


1. Distributed Generation is the fastest way to deploy renewable resources at scale

Europe renewable capacity additions by technology, GW, 2011-28, IEA

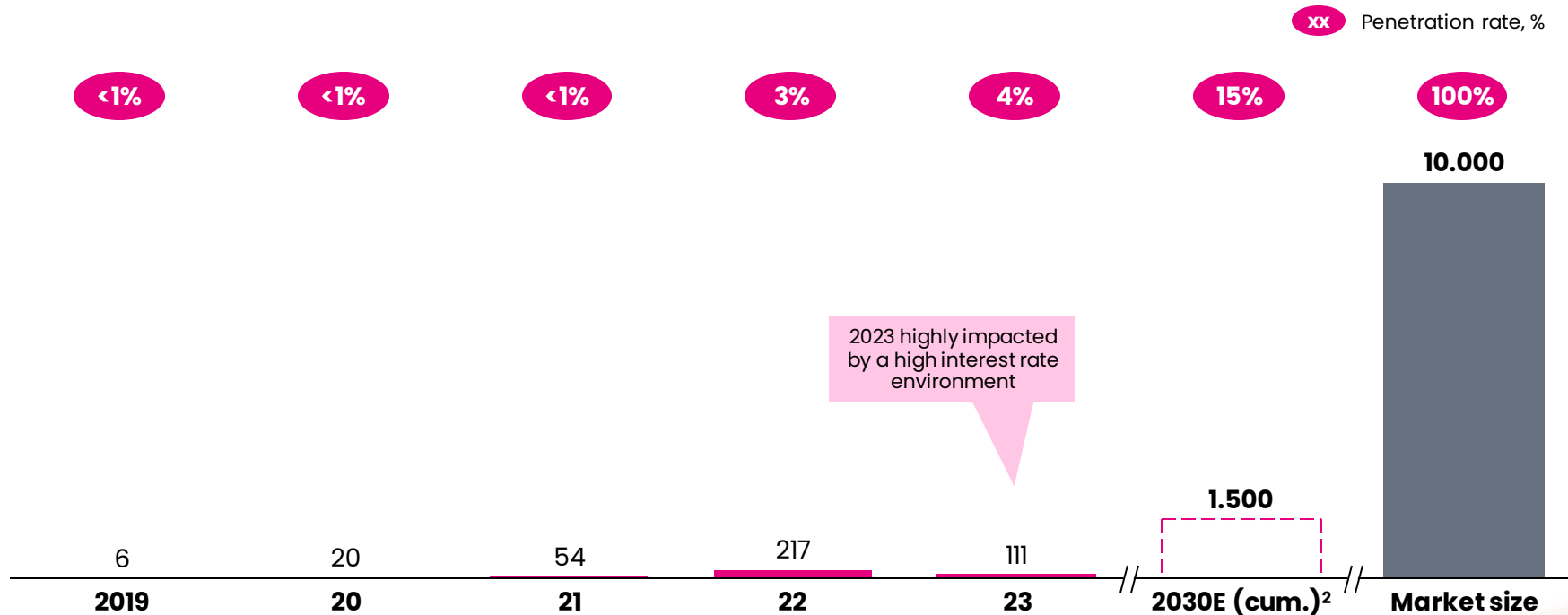
xx Forecast revisions vs. 2022, %

Distributed Generation Utility PV Wind onshore Wind offshore Hydrogen Other



1. Opportunity to grow Distributed Generation in Spain is massive as the market remains vastly underpenetrated at only 4%

Evolution of annual residential solar installations in Spain, # thousands installations¹

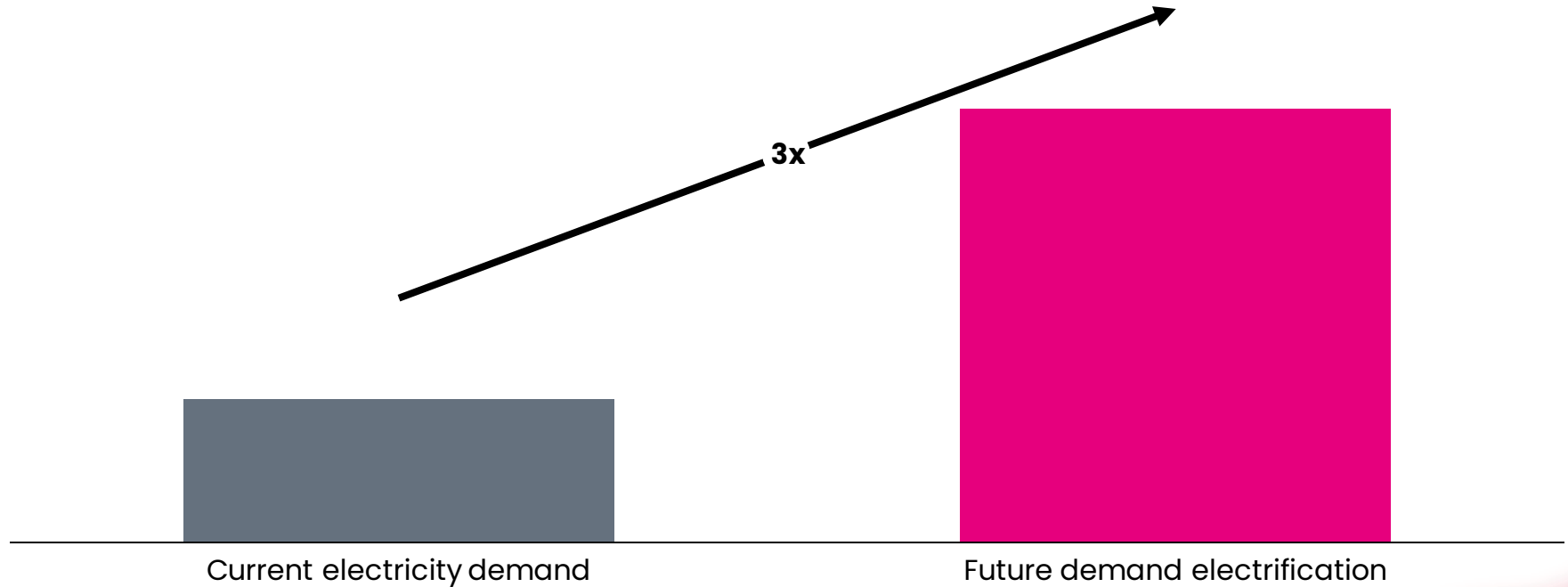


1. Source: Informe anual de autoconsumo fotovoltaico 2022 y 2023, APPA – Asociación de empresas de energías renovables

2. Source: Internal estimation leveraging WoodMackenzie, S&P Global Commodity Insights and Spanish PNIEC sources

2. Electrification of fossil fuel energy sources will triple electricity demand in 2050

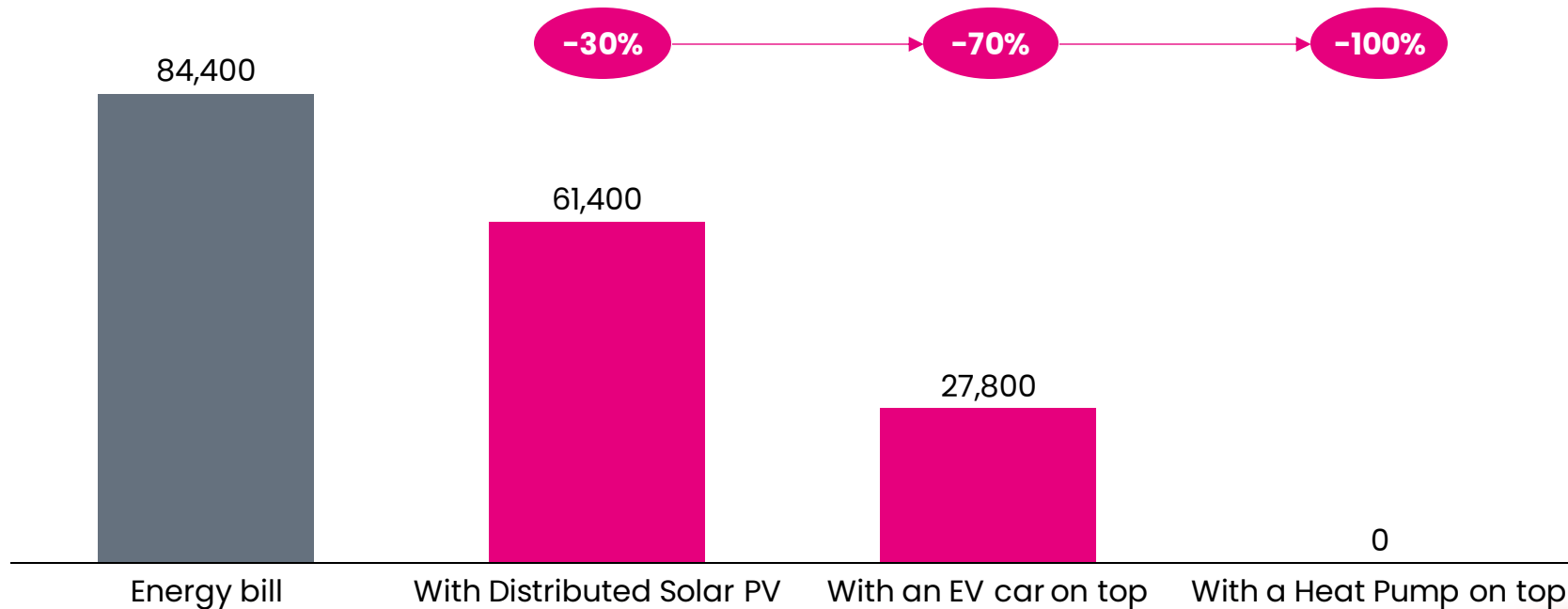
IEA Net Zero forecast, Electricity demand growth



2. Distributed Generation enables a cost-effective electrification of households' energy consumption vectors

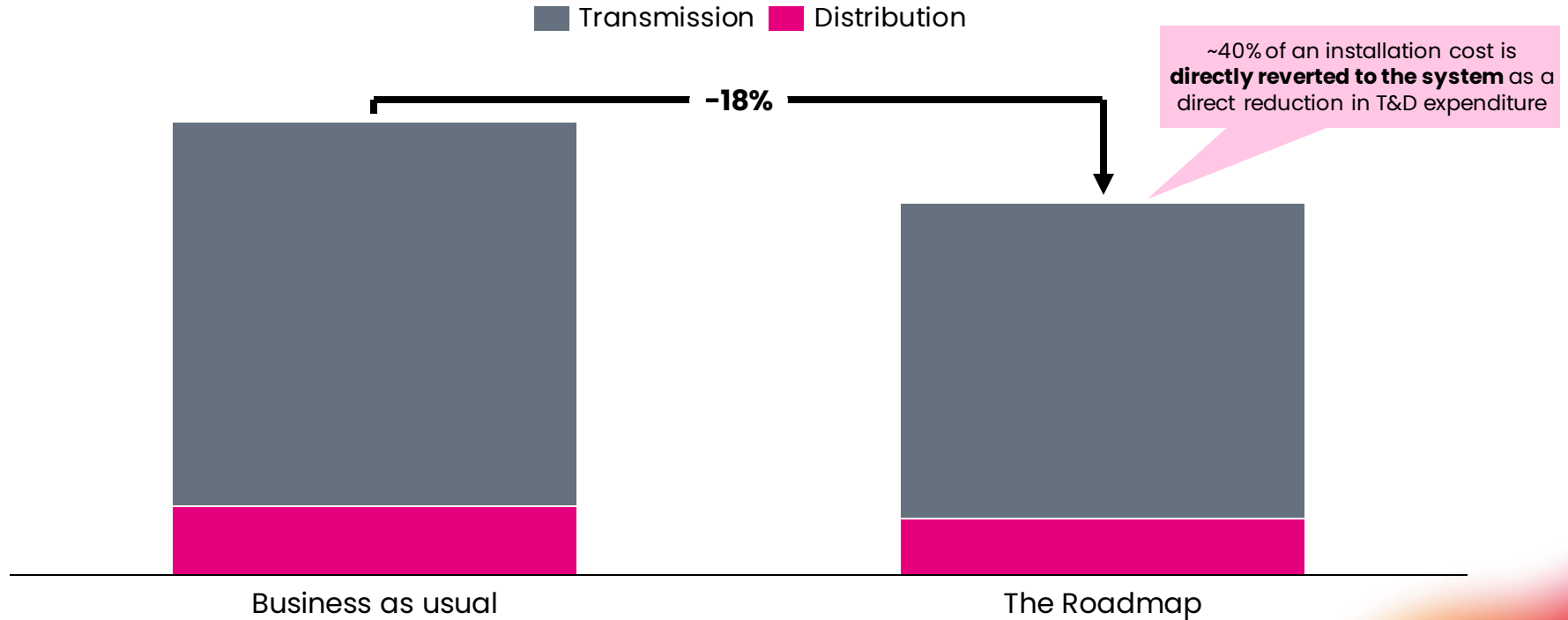
20-year Spanish energy consumption for a typical household, 2024 prices, €

xx Customer savings, %



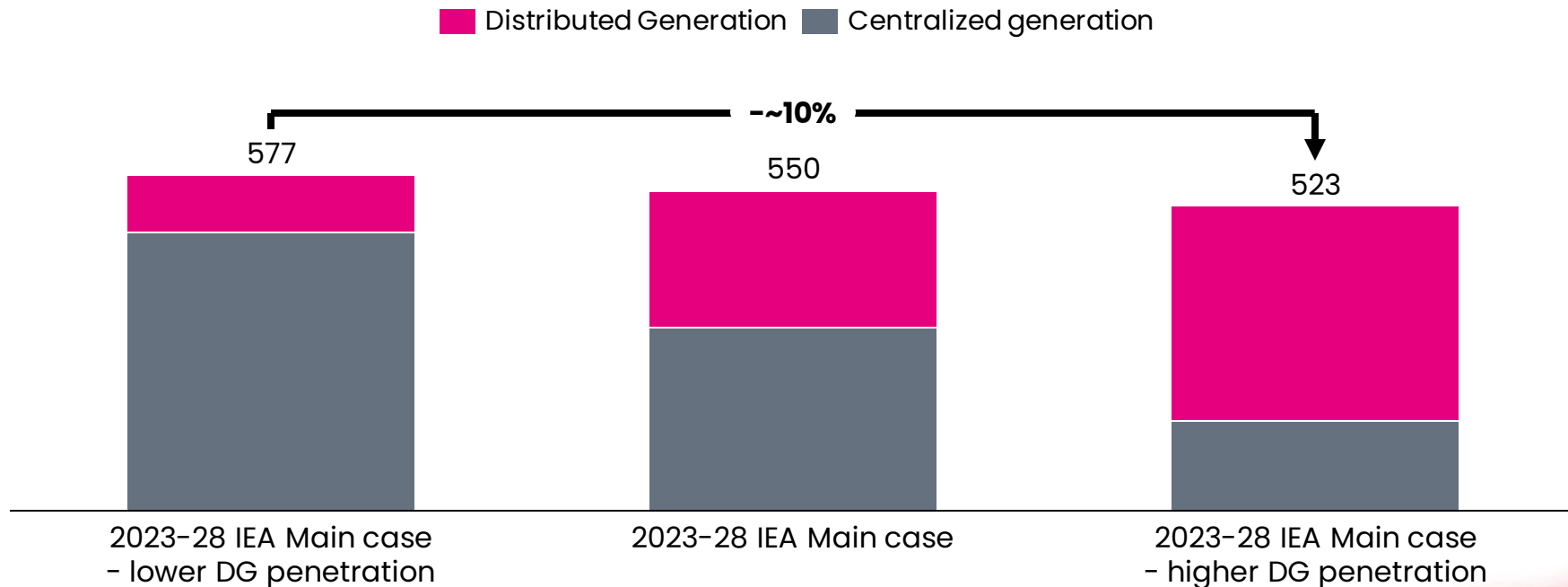
3. Distributed Generation will massively reduce the needs for investments in transmission networks

Investments in T&D grid in Australia under “Business as Usual” and “The Roadmap”, M€

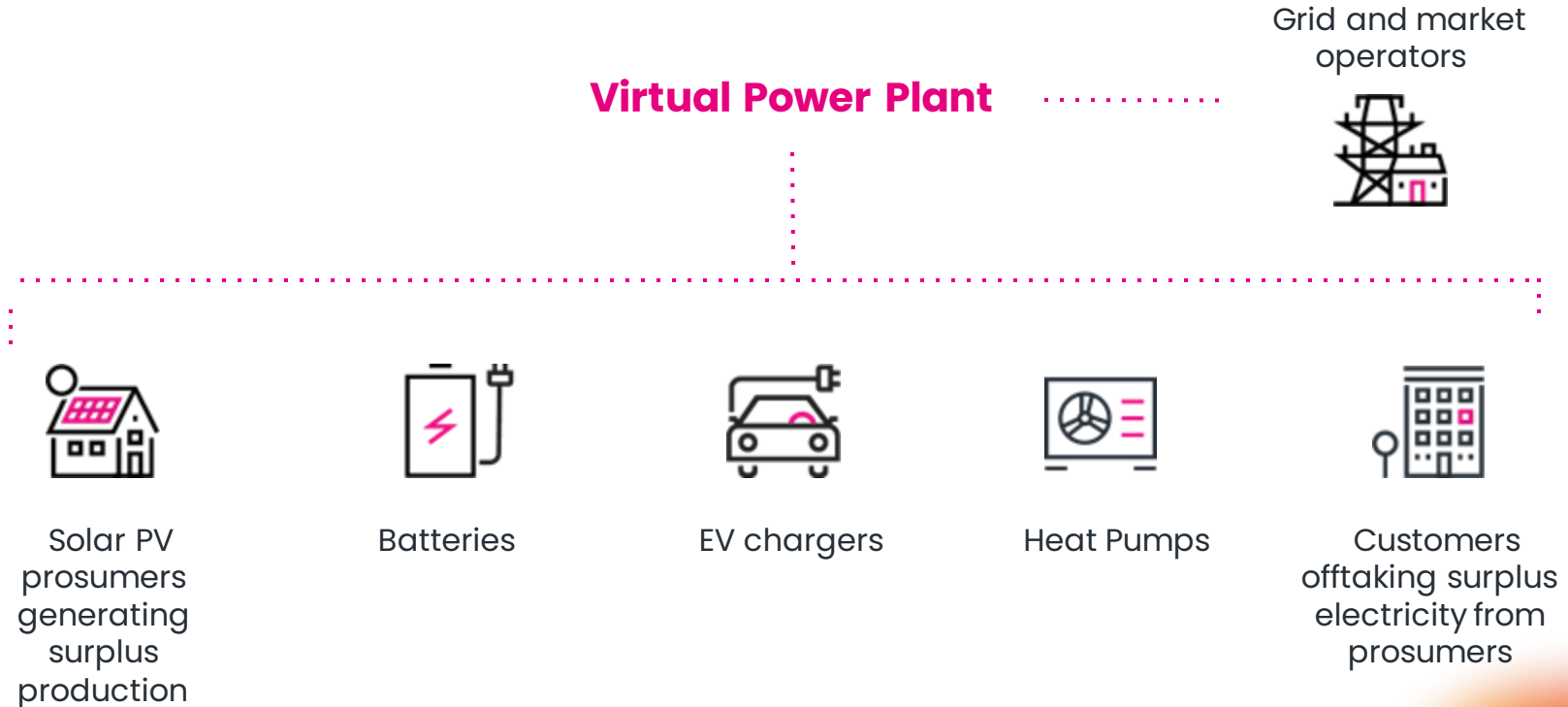


3. Distributed Generation reduces the need for new renewable additions as it avoids system losses by localizing production and consumption

Europe renewable capacity additions by technology, GW, 2011-28, IEA



4. Distributed Generation provides flexibility to the system in a cheap, fast and smart way, coordinated through Virtual Power Plants



5. Distributed Generation has a minimal environmental impact as it uses existing infrastructures and creates long-term employment



Distributed Generation solves the five challenges of decarbonization

▶ Decarbonization Challenge

▶ Distributed Generation Opportunity

- 1 Fast deployment of renewable electricity** to replace fossil fuels
- 2 Extensive electrification of all energy consumption vectors**
- 3 Massive investments required in upgrading electricity networks** and in additional capacity build-up to compensate for **system losses**
- 4 Increased flexibility needs** to operate a 100% renewable system
- 5 Environmental respect** and resulting in **societal benefits**

- ✓ Distributed Generation is a **proven, cost-competitive and 100% renewable electricity source** that can be **installed in 1-2 days**. There are **10 million rooftops in Spain** that could cover all Spanish **tertiary energy demand**
- ✓ Distributed Generation facilitates **electrification** of energy consumption for households as a **DG system combined with flexible assets** eliminates **all electricity, gasoline and natural gas costs**, generating very **high savings for customers** and a dramatic **efficiency increase**
- ✓ Distributed Generation **eliminates the needs for investments in T&D and additional renewable capacity** network as it **localizes generation and consumption**
- ✓ Distributed Generation systems can be **coupled with a battery** (stationary or the one in the EV car) in the same installation day to **provide flexibility to the system** when coordinated in **Virtual Power Plant mechanisms**
- ✓ Distributed Generation systems, as they are installed in **rooftops**, generate **no need for additional land resources**. Moreover, they create **permanent high value jobs** across the entire country and democratize the electricity sector

We need to unlock five different areas to further scale Distributed Generation in Spain

1



Accelerate deployment of **shared energy schemes** like collective self-consumption or energy communities amongst others by enhancing the role of the self-consumption manager

2



Encourage the installation of **distributed storage** systems by enabling their **participation in secondary electricity markets** and allowing them to **charge from the grid whenever** renewable electricity is dominant

3



Incentivize the installation of **distributed energy systems** through **dedicated Green financing structures**, **VAT elimination** on Solar installations and other **direct funding** options

4




Align **objectives of regulated DSO companies** with the objectives of the **energy transition** by reviewing **incentives** and **grid planning** to facilitate Distributed Generation scale-up

5



Set ambitious **Distributed Generation** (beyond pure self-consumption) targets and **publish accurate data** on Distributed Generation installations

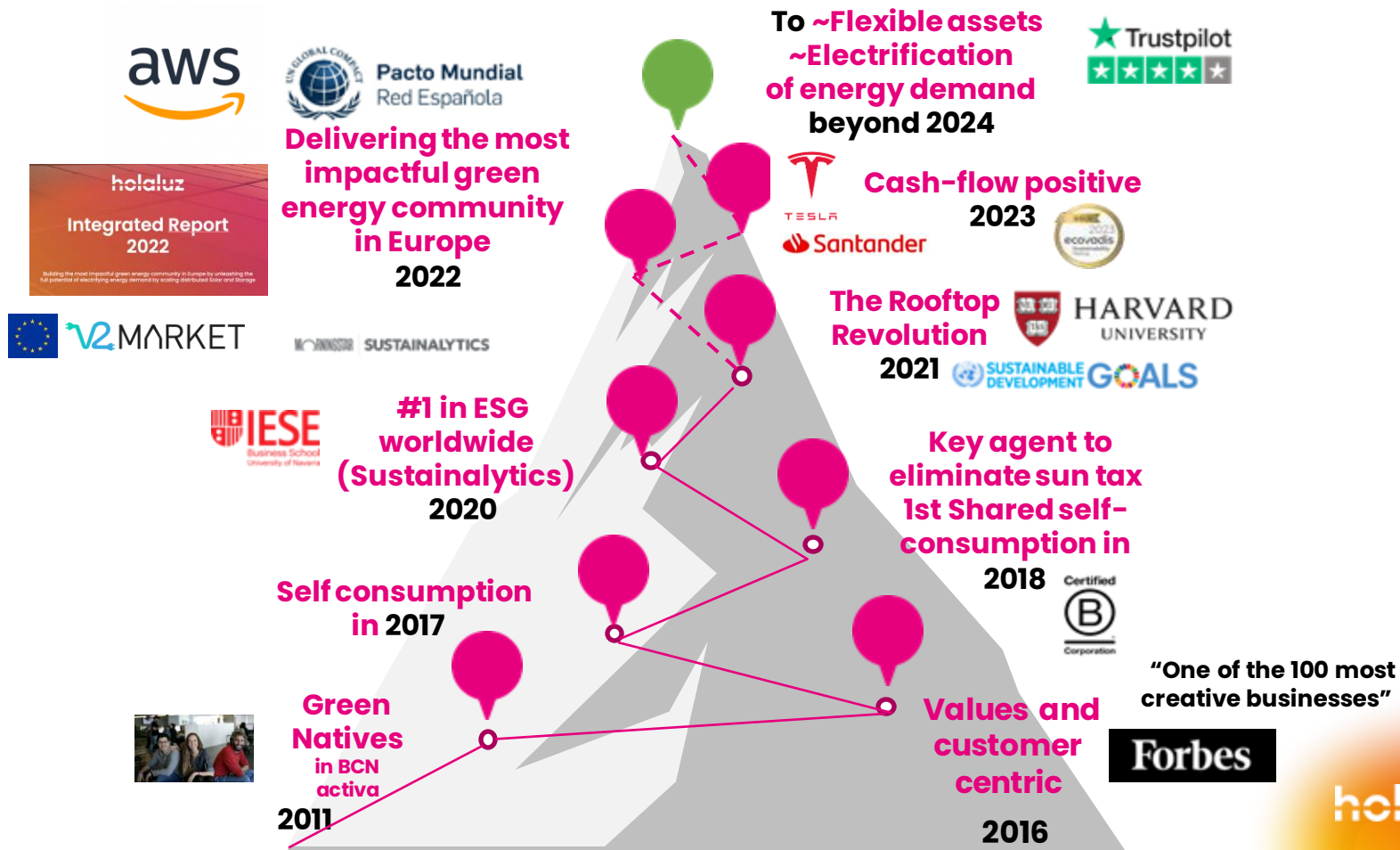


A person stands on the peak of a green mountain, looking out over a vast landscape of rolling hills and mountains under a sunset sky. The sun is low on the horizon, casting a warm orange glow over the scene. The person is a small figure in the distance, emphasizing the scale of the landscape.

Our commitment to **fully decarbonize the world**

We are building **the largest and most impactful green energy community in Europe**, unleashing the full potential of electrifying energy demand by scaling distributed Solar and Storage

+13 years of Holaluz as a GreenTech leader



Holaluz ecosystem combining decentralized Solar PV and Energy Management enables our differentiated business model

A

Connect people to green energy

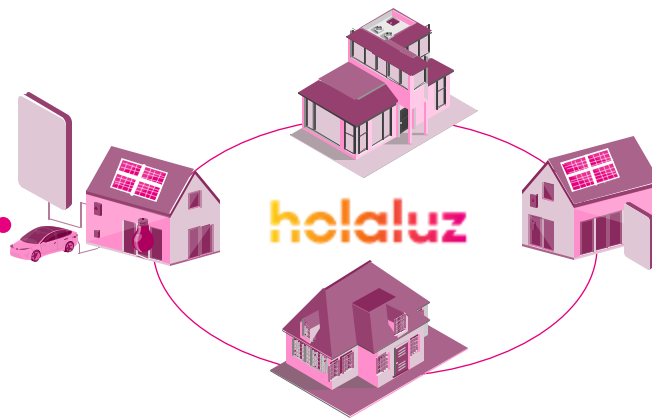
Energy Management business

Holaluz sells electricity to its Supply customers without solar installations ...

C

Holaluz technological ecosystem

... and then **centrally manages its portfolio of Solar customers** through the development of a **technological platform** aimed at optimizing **customer's production/consumption patterns** through communication to smart assets (PV inverters, batteries, EV chargers)



A flywheel powered by trust
And enabled by Technology

Optimize economic value of entire portfolio

Transform every sqm of rooftop into green electricity production and storage

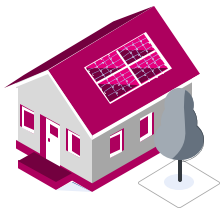
B

Solar business

... **buys that electricity from the surplus production generated by its Solar customers** with PV installations, whose rooftop potential is completely leveraged ...

We are sophisticating the market with our unique value proposition combining the best of Solar and Energy Management

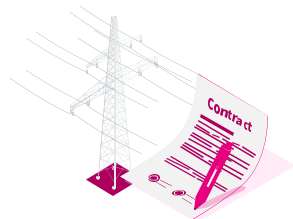
What the average player can do



Solar self-consumption installations



Flexible assets (Battery, EV chargers, heat pumps) installations with a **very limited interaction with the end user**



Basic energy management offering a **fixed price for surplus electricity**



What Holaluz can do

Distributed Generation installations **maximizing rooftop potential** to share electricity with neighbouring customers leveraging proximity network and preparing for **demand electrification**

Home Energy System operator integrating PV, batteries, EV chargers and heat pumps in our **platform** to **optimize client's electricity consumption** and **surplus sharing**

Virtual Power Plant operator leveraging our installed fleet of batteries to **participate in balancing, wholesale and capacity markets**

Most competitive **subscription-based energy management** product leveraging the **ecosystem** of **decentralized producers-consumers** benefitting from **proximity network regulation to skip T&D costs**

We have the greatest value proposition

Customer value proposition includes 70%+ guaranteed savings and an end-to-end customer relationship where we install in 45 days and manage electricity with a #1 ESG 100% renewable energy subscription-based product

Savings

We provide the **maximum savings (70%+)** to our customer through **rooftop maximization and energy management of flexible assets**



End-to-end customer relationship

We manage the **end-to-end installation process**, delivering our solar systems in less than **45 days** for 90% of the customers

Energy management is constantly monitored thanks our **technological platform** and our **maintenance product** to ensure maximization of **customer lifetime value**



Subscription-based

We **guarantee the savings delivered to our clients** after solar installation through a **monthly fixed subscription-based invoice** (Tarifa Justa), leveraging our **heavy use on technology and data** to deliver the maximum savings



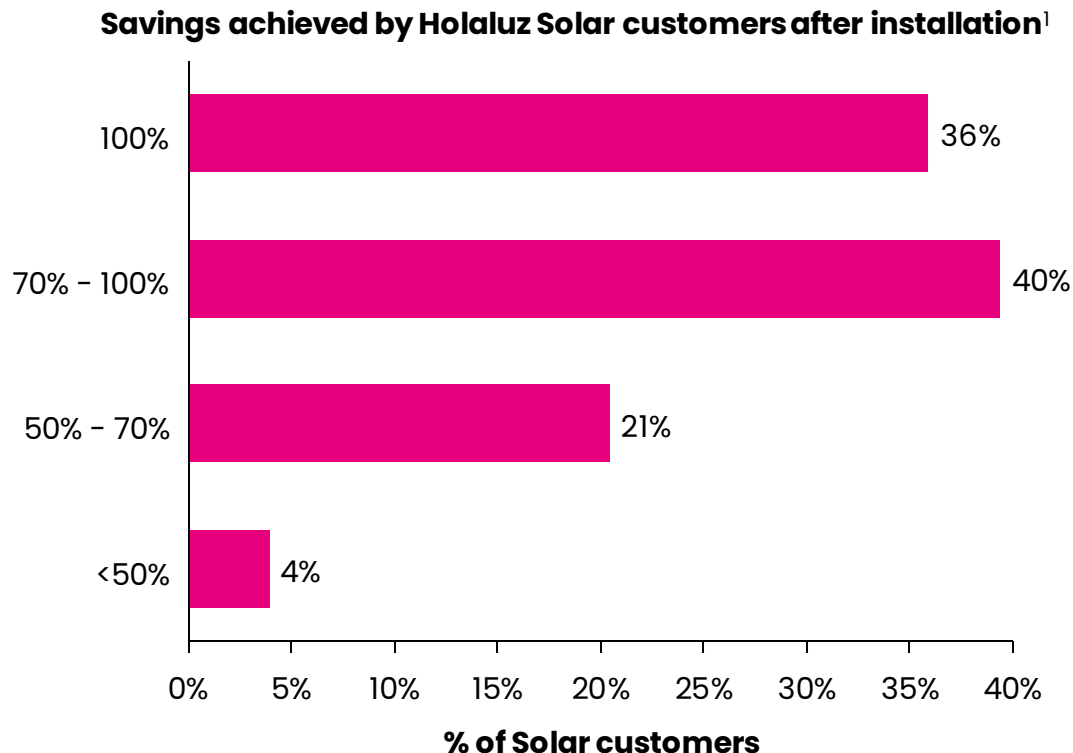
Sustainability

We guarantee all our **electricity is sourced from 100% renewable origin**, both from neighbouring decentralized customers and centralized PPA plants



We are the **#1 ESG player worldwide** in our category

Holaluz Value Proposition is unrivaled, with 75% of customers achieving 70%+ guaranteed savings after Solar installation



1. Note this graph does not include clients with Solar PV and battery; if they were included the savings would increase further

- Holaluz is focused on generating **long-term** and **end-to-end relationships** with its customers
- Holaluz clients get:
 - Solar installation delivered in less than 45 days with the **highest quality and safety standards** combined with
 - **Guaranteed fixed electricity rate** (our “Tarifa Justa”) which gives customers **peace of mind** and certainty about the savings after Solar – materialized the first day after installation is complete
- This translates into the **highest savings in the market:**
 - More than 75% of customers achieving 70%+ guaranteed savings after Solar
 - When combining Solar with batteries, **60%+ of our customers pay 0 € for total their electricity needs**

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Recognitions



In 2018, Holaluz became the **first EU energy company** to join the **B Corp movement**. By 2022, the company updated its impact assessment, achieving a higher score and securing the **top position** among companies with revenue over 1.5 million in Spain.



As a member of the **United Nations Global Compact**, the company is committed to implementing **universal sustainability principles across its operations** and maximizing its contribution to the **SDGs**.



In January 2023, **Holaluz ranked n°1 worldwide in Sustainability's ESG Risk Ranking** for **independent power production and traders**, achieving the **top-rated** recognition **within the industry** (utilities). Sustainability is a leading independent ESG research, ratings, and data firm.



EcoVadis Gold Medal, awarded for its sustainability performance. The company achieved a score of 73/100, positioning it in the **top 5 percent** of companies globally with the highest scores.



4 out of 5 stars rating on Trustpilot, a platform for collecting customer reviews. Throughout 2023, Holaluz maintained the highest industry rating with a 'Very Good' rating and 4 stars (4.0 points), based on over 5,400 customer reviews on the platform.



In 2022, the company joined the **Business Ambition for 1.5°C initiative**, committing to **short- and long-term science-based targets**. In 2023, it **submitted its targets** and **decarbonization** plan to the Science Based Targets initiative (SBTi) for validation.



Operational excellence is achieved through the implementation of **certified management systems**: **ISO 9001-certified Quality Management System** within the Customer Care team scope, **ISO 14001-certified Environmental Management System** in offices and main warehouses, and **ISO 14064-certified Greenhouse Gas Emissions Inventory** across all three scopes.



Algorithmic transparency Certificate from **Adigital**, demonstrating commitment to a future of transparent, explainable, and inclusive AI.



Confianza Online is the leading **Internet quality certificate in Spain**, providing recognition for companies that ensure maximum transparency, security, and trust for users when buying and browsing their websites.

baby friendly



First Spanish electricity company to obtain the **Baby Friendly Company** certificate, which recognizes companies that promote **work-life balance** and family-friendly policies.



Founding company of Conscious Capitalism in Spain, a philosophy that acknowledges the inherent potential for businesses to **contribute positively to the world**.

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Access the full report here:
The Rooftop Revolution Report

Building the most impactful green energy community in Europe by unleashing the full potential of electrifying energy demand and by scaling distributed Solar and Storage

