

THE SOCIAL IMPACT OF ENERGY TRANSITION

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AGENDA

- ENERGY TRANSITION TARGETS IN ITALY
- EDISON, LEADER OF SUSTAINABLE ENERGY TRANSITION
- **RELEVANT STAKEHOLDERS: THE ENGAGEMENT PROGRAMMES AND THE IMPORTANCE OF THE SHARED VALUE**
- AN ECONOMIC MEASURE: THE DISTRIBUTED VALUE (GRI 201-1) AND SOME EXERCISES AT REGIONAL LEVEL
- 3 EXAMPLES OF SOCIAL IMPACT AND RELATED MEASUREMENT METHODOLOGIES
- 1) LOCAL COMMUNITIES/TERRITORIES
- → INTERCULTURA PROGRAM

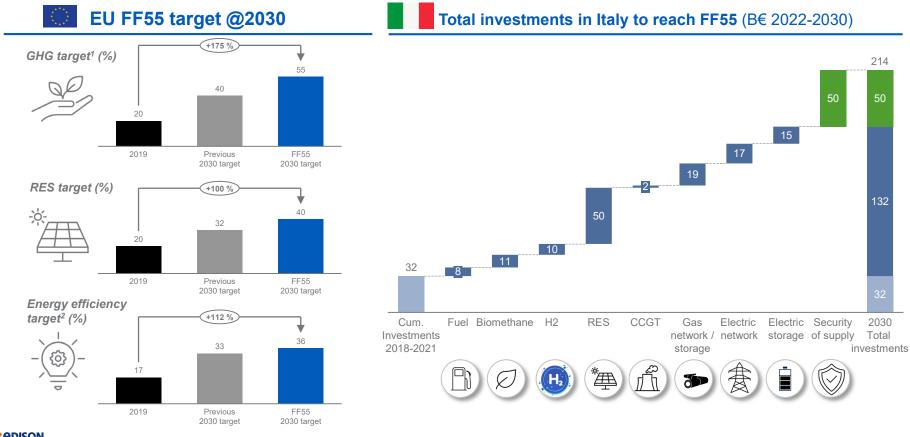
- 2) SUPPLIERS
- 3) CUSTOMERS AND CONSUMERS

- → RESPONSIBLE MANAGEMENT OF THE SUPPLY CHAIN
- → AFFORDABILITY: BEYOND SDG 7 TOWARDS A «QUALITY ENERGY»
 - ✓ ENERGY POVERTY: AN EMERGING NOTION AND A MEASUREMENT CHALLENGE
 - ✓ THE SYSTEM RESPONSE: THE SOCIAL BONUS AND THE OPERATORS RESPONSE (BANCO DELL'ENERGIA INITIATIVE AND SOLIDARITY ENERGY COMMUNITIES)



ENERGY TRANSITION TARGETS AND CAPEX NEED

INVESTMENT PORTFOLIO MIX AND EVOLUTION OVER TIME IN ITALY



(1) 55% GHG emission reduction in 2030 versus 1990 and -100% by 2050 (2) 2007 reference scenario for 2030 Confidential – For internal use only

2030

Total

214

EDISON - LEADER OF SUSTAINABLE ENERGY TRANSITION (DEC. 2022)



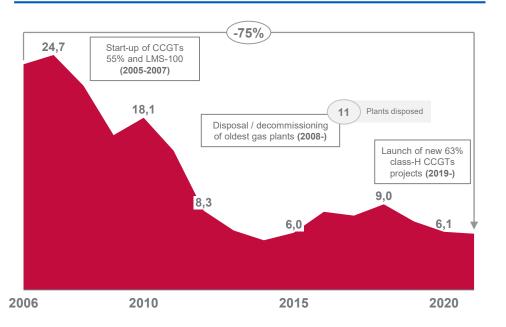
* In energy services through Edison Next. ** In power generation through JV Elpedison.





75% REDUCTION OF CO2 DIRECT EMISSIONS DRIVEN BY EFFICIENCY IMPROVEMENT OF GAS POWER PLANT FLEET

Evolution of Edison CO2 direct emissions (Mton)



- Edison maintained over the years its role as key power generator, in a country heavily relying on gas power plants to produce electricity (50% mix) ...
- ... while progressively reducing its CO2 impact, improving gas plant fleet efficiency (in addition to RES development)
 - Focus on 55% efficiency CCGTs
 - o Oldest gas plants disposal / shut down
- As first mover in EU, Edison is commissioning the two new high-efficiency (63%) CCGTs of Marghera and Presenzano
 - Partial substitution of 55% fleet (end of life around 2030)
 - Support system adequacy
 - -10% CO2 emissions vs. CCGT 55% and -35% vs. Italian thermo plants fleet @2020

Direct CO2 emissions reduction driven by efficiency improvement of the gas power plant fleet

EDISON IMPACT ON SDGS

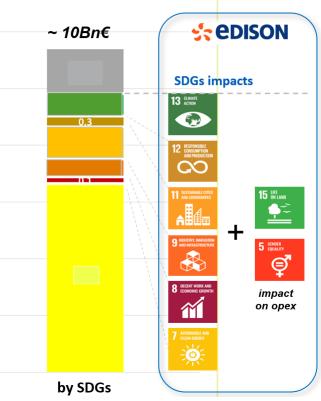


Edison plans to invest ~ 10Bn€ between 2023 and 2030 of which 85% on avg are aligned with the United Nations Sustainable Development Goals (SDG).

Our focus is naturally on **SDG 7 (Affordable and clean energy)** and **SDG 13** (*Climate Action*) with over 7Bn€ targeted in particular toward the development of new renewable capacity (wind, photovoltaic and hydropower). But we also aim to support **SDG 11 (Sustainable cities and communities)** with ~ 1bn€ of investment targeted toward energy efficiencies initiatives such as urban regeneration, public lighting, e-mobility.

Overall, our CAPEX plan also covers **SDG 9** (Industry innovation and infrastructure), SDG 12 (Responsible consumption and production) and **SDG 8** (Decent work and economic growth) through various initiatives from production of green gases to installation of energy storage and/or consumption reduction solutions.

Outside of its CAPEX plan Edison also mobilizes a significant amount of resources on SDG 15 (Life on land) and SDG 5 (Gender equality) through specific policies and action plans



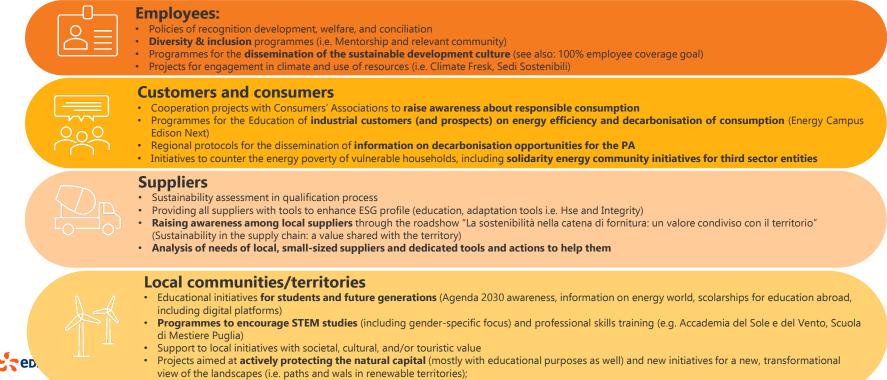
Cumulated CapEx 2023-2030



RELEVANT STAKEHOLDERS: ENGAGEMENT PROGRAMMES

With regard to the categories Employees, Suppliers, Customers/consumers, and local communities and territories the company carries out:

- Programmes aimed at listening and discussing the impacts and the expectations towards its activity as an operator committed to the sustainable energy transition
- Projects and initiatives aimed at creating a positive socio-economic, cultural, and/or naturalistic-environmental impact.
- For the programmes with an exclusively social impact, the company benefits from the help of the philantropic Fondazione Edison Orizzonte Sociale



Adoption of protocols to build infrastructures that are sustainable all along their life cycle

TERRITORIAL PROJECTS: THE IMPORTANCE OF THE SHARED VALUE EDISON LOCAL COMMUNITIES INVOLVEMENT TARGET: 100% OF SITES @2030



Bilanci Territoriali

Val d'Ossola Valtellina - Sondrio Valle Camonica –Brescia L'asta del Fiume Adda Friuli



ADA 270
Adamello glacier scientific study



Sedi Sostenibili Edison

Rivoli Milano Roma Bari Napoli Palermo

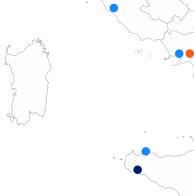


SCUOLE PROGETTO PILOTA A.S. 2020-21

Progetto Scuola Edison

Istituto Tecnico Ferrari, Torino Istituto Professionale Marconi, Domodossola Istituto Tecnico Mattei, Sondrio Istituto Tecnico Natta, Milano Liceo Aselli, Cremona Istituto Tecnico Marconi, Bari Liceo Benzi, Lecce







 Sentieri dell'Energia
Valtellina/Valchiavenna, zona tra Puglia, Basilicata, Campania Biodiversità
Parco delle Orobie
Pescopagano
Palestro
Parco della Sila



 Workshop Stakeholder Engagement Mazara del Vallo

AN ECONOMIC MESSURE: DIRECT ECONOMIC VALUE (GRI 201-1) AND SOME EXERCISES AT REGIONAL LEVEL

Information on the **creation and distribution of economic value** provides a basic indication of how an organization has created **wealth for stakeholders**

GRI 201-1 Direct economic value generated and distributed

	2020	2021	2022
	Millions €	Millions €	Millions €
Direct economic value generated	6,529	11,990	30,625
Economic value distributed	5,740	11,326	29,997
Operating costs	5,394	10,501	28,984
Employee salaries and benefits	321	335	368
Investments in the community(*)	6	5	5
Payments to capital suppliers	24	304	153
Payments to public administration	(5)	181	487
Economic value retained	789	664	628

The values were determined from the consolidated financial statements and shown on an accrual basis and not on a cash basis.

The sharp increase 2022 compared to 2021 on VEG and operating costs reflects, among other things, the sharp rise in reference commodities prices in the financial year 2022.

Payments to capital providers in 2021 and 2022 include dividends declared by the parent company Edison Spa. Payments to the Public Administration in 2022 reflect, among other things, the effects of the solidarity contributions provided for in the various decree laws (Price Cuts, 4xi) and the Budget Law 2023 issued in 2022.

In 2021, Edison also promoted the establishment of the non-profit foundation EOS Orizzonte Sociale, with cive, solidarity and utility purposes, providing the respective Endowment and Management Funds to finance all its initiatives in favour of communities. These contributions are not accounted for in this reporting as EOS is not included in the company's consolidation scope and reference is made to its 2021 Social Report for them https://fondazioneeos.t/stites/default/files/documents/ BS_EOS_2022_Revu_adf.





https://reporterritoriali.edison.it/

INTERCULTURA PROGRAM – EDISON FOR THE TERRITORIES



Ex 1

Con il sosteano di

BORSA DI STUDIO PER VIVERE E STUDIARE ALL'ESTERO

Grazie alla collaborazione con EDISON, presente sul territorio con i propri impianti idroelettrici, la Fondazione Intercultura ha istituito

> una borsa di studio totale per vivere e studiare da 3 mesi a un anno scolastico all'estero,

per studenti meritevali nati tra il 01/01/2003 e il 31/12/2006, residenti nel Comuni di Banchette, Banio Anzino, Bastia Mondovi, Borgofranco d'Ivrea, Camandona, Canosia, Carrio, Ceppo Monelli, Clavesana, Farigliano, Fiorano Canovese, Ivrea, Lessolo, Mondovi, Montato Dora, Montescheno, Pedimilurea, Pieve Vergonte, Piozzo, Portula, Quassolo, Settimo Vittone, Tavagnasco, Trivero, Vallanzengo, Vanzone con S. Carlo, Villadossalo, Vaogana

Iscrizioni entro e non oltre l'11 gennaio 2021 Scopri maggiori dettagli su www.intercultura.it/gruppo-edison-impiant

Per informazioni è possibile contattare Intercultura al numero 06/48882411 (sede di Roma) oppure scrivere a <u>segreteria.roma@intercultura.it</u>

L'organizzazione dell'iniziativa è affidita all'Associazione Intercultura, organizzazione senza scopo di lucor dal 1935 leade nel cempo degli scambi scalatzi interculturali, ereta in Ente movie posto stato la tuteli del Ministero degli Affari Esteri e riconsciuta con decreto dal Presidente della Repubblica (DPR n. 75%/1935). Attraverso Topera dei volontari dell'associazione, presenti in tuto il amolo, Intercultura affri

IMPACT

Objective of change pursued by Intercultura:

Contribute to the creation of new generations capable of opening up to the world and living like citizens aware and prepared for a multicultural society

WHAT: Evaluation of the socio-economic impacts generated by the program in the reference area, with attention to the effects experienced by direct beneficiaries (children) and indirect beneficiaries (families)

WHY: investigate the ability of the contribution of the scholarships to produce relevant outcomes in direct beneficiaries

INTERCULTURA FOR THE EDISON TERRITORIES: the company supports the program of the largest notfor-profit Italian organization in the field of pupils' mobility to and from 65 countries in all continents, through the subsidy of scholarships to deserving students residing in the municipalities where its plants are located,

BENEFICIARIES: from 2019 to today 25 students (6 boys and 19 girls) from 6 different territories with 10

HOW: Methodological approach inspired by the Theory of Change (ToC), with a mixed approach, both enhancing the dimensions of qualitative change (through storytelling), and identifying the dimensions of economic change.

- Interviews and surveys with young people
- Parent interviews

ANALYSIS OUTPUT

The most relevant outcomes generated thanks to the contribution of the scholarships were

the increase of:

✓ self confidence

autonomy

- ✓ ability to face challenges and difficulties
- ✓ importance attached to the knowledge of foreign languages
- ✓ ability to create relationship with other people
- ✓ ability to understand future paths and ambitions

for stavs and study abroad (form 3 or 6 months up to 1 year).

annual, 2 semester and 13 summer scholarships

- ✓ mental openness and empathy towards others
- ✓ sense of international citizenship

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SUPPLIERS PORTFOLIO MAPPING

Perimeter of the analysis: suppliers qualified of goods & services and production sites **Local supplier definition**: based in the same region of Edison's business activity

NUMBER OF LOCAL SUPPLIERS

More than 60% of the functional suppliers to the operational sites are local suppliers

SPENT FOR LOCAL SUPPLIERS (M€)

More than 10% of the total spent on operational sites remains in the territories through local suppliers;

DIMENSION

> 50 M€

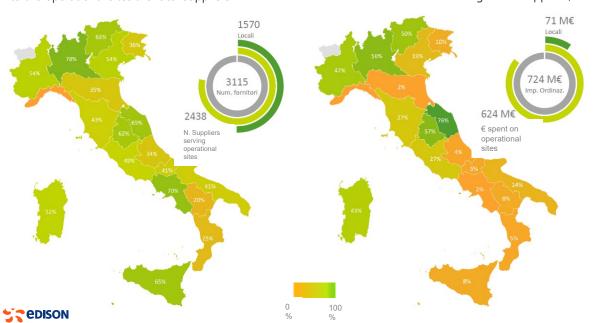
< 50 M€

< 10 M€

Fatturato

More than 70% of the cluster* are micro, small or medium compnies

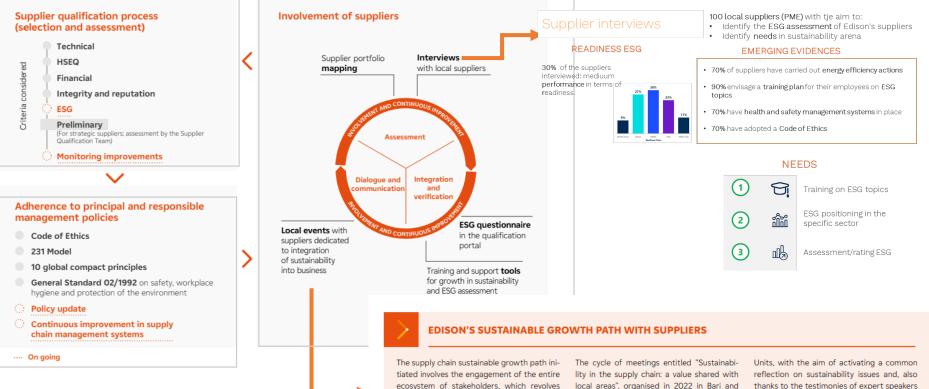




RESPONSIBLE MANAGEMENT OF THE SUPPLY CHAIN

EDISON'S APPROACH TO SUSTAINABLE PROCUREMENT

An evolutionary model combining risk monitoring, value creation with suppliers and engagement practices from an ESG perspective



around the supply chain, in a kind of alliance

between the company and its suppliers.

Naples, involved a total of more than 90 sup-

pliers (based in Apulia, Campania, Basilicata

and Calabria), buyers and company Business





Ex 2

LA PERCEZIONE DEL PROBLEMA DELLA POVERTÀ ENERGETICA



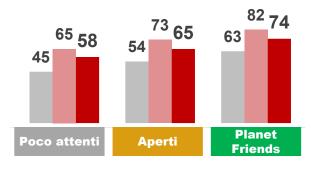
Per **povertà energetica** si intende l'incapacità da parte di famiglie o individui di acquistare un paniere minimo di beni e servizi energetici, con conseguenze sul loro benessere. Le famiglie in povertà energetica sono quelle che, avendo una spesa totale "bassa" hanno una spesa energetica "eccessiva" (sono costrette a stressare il loro bilancio mensile) oppure una spesa per riscaldamento nulla (devono comprimere i consumi essenziali).

Energy poverty means the inability of families or individuals to buy a minimum basket of energy goods and services, with consequences on their well-being. Families in energy poverty are those who, having a "low" total expenditure, have an "excessive" energy expenditure (they are forced to stress their monthly budget) or zero heating expenditure (they have to reduce essential consumption).

È un problema che interessa l'Italia...



La povertà energetica interessa l'Italia in maniera importante



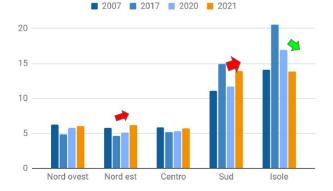
■ ott-21 ■ ott-22 ■ mag-23



Base: Totale Campione (n=1042) – Valori % Q10. Secondo lei, quello della povertà energetica è un problema che interessa anche l'Italia attualmente?

ENERGY POVERTY: AN EMERGING NOTION AND A MEASUREMENT CHALLENGE

per ripartizione



per tipo di comune

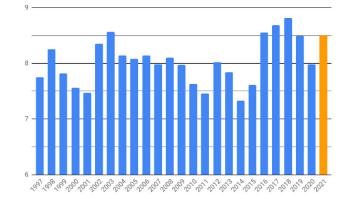




950.000 minors (10%) in 583.000 families in energy poverty;

higher incidence phenomenon in foreign families (2.5x)

La povertà energetica in Italia



Media 2001 - 2021: 8,1% o 2,0 mln famiglie (2,2 mln famiglie in PE nel 2021 – 8,5% del totale)

Fonte: «La povertà energetica in Italia nel 2021», OIPE, 2 dicembre 2022

THE OPERATORS RESPONSE: BANCO DELL'ENERGIA INITIATIVE AND SOLIDARITY ENERGY COMMUNITIES TO ADDRESS SOCIAL VULNERABILITY





« .. In considerazione del fenomeno della povertà energetica che molte famiglie si trovano a fronteggiare soprattutto in realtà geografiche e sociali disagiate, Edison Energia, accompagna il traguardo dei 2 milioni di contratti con un progetto di impatto sociale donando alla Fondazione Banco dell'energia e alla Fondazione Edison Orizzonte Sociale impianti di produzione da fonti rinnovabili finalizzati alla realizzazione di comunità energetiche solidali - o altre soluzioni solidali di produzione e consumo energetico – per un ammontare complessivo equivalente a 2 milioni di euro ... »

Nicola Monti, Edison CEO Milano, 18 aprile 2023

https://fondazioneeos.it/

Contatti



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https://www.edison.it/sites/default/files/documents/Edison-DNF2022-ITA-v.interattiva.pdf



BACK-UP



Sustainability of energy expenses for customers and competitiveness of the industrial system and Public Administration



COMBATING ENERGY POVERTY

In November 2022, the "Energy in the Suburbs" project was launched in Reggio Calabria, promoted by Edison as part of the "Manifesto against energy poverty", as a concrete step to make a corporate contribution to a serious and urgent phenomenon. The territory of Calabria, according to Italian Observatory on Energy Poverty (OIPE) estimates, is in fact particularly affected by the phenomenon of energy poverty, which impacts up to 36% of households.

This is the first initiative of its kind in a southern Italian territory and follows Edison's decision to sign the Manifesto promoted by the Energy Bank - a non-profit organisation of A2A and its Foundations - in April 2022.

The network of stakeholders that have signed the Manifesto (companies, research institutes, associations and entities, as well as consumer associations) share the same objectives: to work together to be more effective in mitigating and combating energy poverty, promote local projects on a national scale; raise the awareness of policy makers and public opinion as well as educate on energy efficiency. A concrete sector impact in 2022 consists of 9 initiatives implemented or in the process of being implemented, which amount to a total of 500,000 euros in contributions.

Edison's project is aimed at 100 households in Reggio Calabria living in energy poverty which will benefit from economic resources to pay their bills (a contribution equal to covering about six months of gas bills), the supply of low-consumption LED light bulbs and a path of coaching on energy awareness. It is a contribution of solidarity, made possible by teamwork with the initiative's partners: local associations with a good knowledge of the social fabric and situations of vulnerability such as Banco Alimentare (which identifies families, knowing their situations of destitution) and Adiconsum (which pays the bills and does the reporting), as well as Signify (which donates the LED bulbs).

Finally, household training on responsible consumption issues will be provided through TEDs (Domestic Energy Tutors), who inform, raise the awareness of, guide and advise consumers in households, particularly vulnerable ones, on energy consumption and the behaviour to be adopted.

In December 2022, on the occasion of the 3rd Plenary of the "Together to Fight Energy Poverty" Manifesto, Edison announced that it would join the Board of Directors of the Energy Bank Foundation with a three-year commitment.

