

9th EUSAIR Annual Forum - SESSION ON ENERGY Noemi Magnanini - Senior Officer International Relations

# THE GSE GROUP

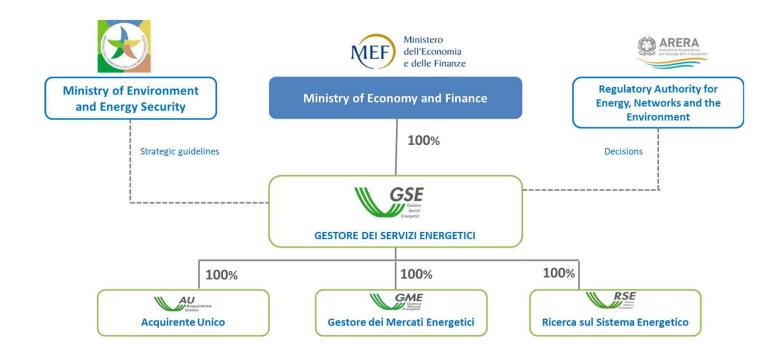
Our Mission is to

Promote Sustainable

Development.

Italy has Invested in
the Promotion of
Environmental

Sustainability and in
the transition to Low
Carbon economy.



GSE is the Italian Implementing Agency for Energy Sustainability

**€12.06** billion group turnover in 2022



# **GSE – MAIN ACTIVITIES**



### **INCENTIVES AND MARKET ACTIVITIES FOR RES-E POWER PLANTS**

- Power plants qualification activities
- Support schemes management, energy trading, and certification of RES energy
- Energy production selling and forecast



#### **RES-H AND ENERGY EFFICIENCY** SUPPORT AND PROMOTION



- White certificates
- Conto Termico
- High Efficiency CHP



#### SUSTAINABLE MOBILITY SUPPORT **MECHANISMS**

- Biomethane
- Advanced biofuels
- Electric vehicles charging support



#### **VERIFICATION ACTIVITIES**



### **PUBLIC ADMINISTRATION, CITIZENS** AND COMPANIES ASSISTANCE



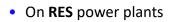
- Assistance to Local Authorities, Governmental Bodies and other kinds of **Public Administration** for energy efficiency improvements and public services renovation.
- Training and Information for sustainable energy initiatives
- Best cases promotion



#### **INSTITUTIONAL AND TECHNICAL SUPPORT ACTIVITIES**

- Statistics, technical economic analyses and support for the elaboration of plans and programs and during their monitoring process (ES. NECP, etc.)
- Emissions Trading
- Communication
- **International** relations and projects





• On energy efficiency interventions

 On CHP plants also combined with DHC networks



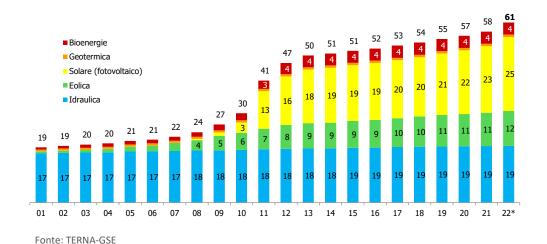
## THE ITALIAN RENEWABLE ENERGY DEVELOPMENT

Italy is deeply involved in the clean energy transition through the implementation of a secure, sustainable and affordable energy system.

In **2022** renewable energy power plants generated (101 TWh). RES promotion policies made an important contribution to these results.

At the end of 2022, approximately 61 GW of RES plants were installed in Italy in the electricity sector; solar sources concentrate the greatest gross efficient power (25 GW), followed by hydro (19 GW) and wind (12 GW).

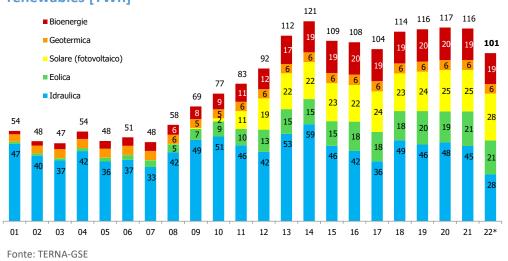
Gross efficient power of electricity production plants powered by renewable sources[GW]



In 2022, overall production from RES stands at around 101 TWh, a sharp decrease compared to the previous year (-13%), mainly due to the strong contraction in hydroelectric production (-38%); solar production grows by +12%; slight variations for the other sources.

Solar source and the water source (a total of 56 TWh almost equally distributed) represent 56% of the total renewable electricity generation.

# Gross production of electricity production plants powered by renewables [TWh]





# **ITALIAN RES-ELECTRICITY SUPPORT SCHEMES**

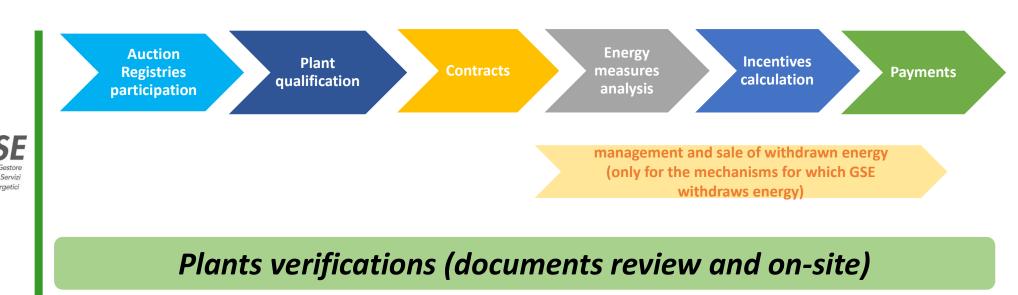
- Several incentive mechanisms have been deployed to support RES power plants evolution
- From 2012 support schemes were more based on **competitiveness**, through the introduction of auction and registries

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|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CIP 6/92<br>(Feed in tariff)  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Certificati Verdi<br>(Green Certificates)                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Conto Energia FTV<br>(Feed in premium)                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Tariffe Onnicomprensive<br>(Feed in tariff)                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Conto Energia CSP<br>(Feed in premium)                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MD July 6th 2012<br>(Feed in premium/Feed in tariff)                        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MD June 23rd 2016<br>(Feed in premium/Feed in tariff)                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MD "Small islands" (MD Februry 14th 2017)<br>(Feed in tariff)               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MD "RES 1" (MD July 4th 2019)<br>(Feed in premium/Feed in tariff)           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Energy communities and selfconsumption<br>(MD 16/09/2020) (Feed in premium) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| ·   | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2002 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |



# **GSE MANAGEMENT OF SUPPORT MECHANISMS**

GSE manages the support mechanisms from both technical and economic-administrative perspectives: receipt of the projects applying for the incentives, plants qualification and verification, energy measurements analysis, calculation and issue of incentives, sale of withdrawn energy.



**Technical and administrative modifications** 





### **GSE INTERNATIONAL ACTIVITIES**

# International Organizations and multilateral Initiatives

GSE - in close cooperation with Italian Ministries - participates in the main international projects and multilateral initiatives sharing the Italian experience, national results and regulatory framework implemented in the RES sector (IEA, IRENA, Mission Innovation, G7, G20 etc.).



















GSE is the Italian focal point and represents Italy within several IRENA activities such as in the "The **Long-term Energy** Scenarios for the **Clean Energy Transition** Campaign" and Collaborative

Framework

GSE is Italy's contracting party in the Renewable **Energy Working** Party and in the **Technology** Collaboration **Programme** 

GSE supports the **Italian Ministry for Environment and Energy Security** in the **G7** and **G20** multilateral technical activities

**GSE** represents Italy as Vice Chair of the Group of Expert on Renewable **Energy - GERE** 

GSE is the Member of OMEC and participates in all the Association's Working Group: Strategy and Cooperation, Energy Transitions, Investment, Energy

Security.

GSE is the Italian focal point and represents Italy within several UfM Activities

GSE's Statistical Office participates regularly in the **Issuing Bodies** works of ESWG - Energy **Statistics Working Group.** 

GSE is a member of the Association of (AIB) – ECS (European Energy Certificate System).

**GSE** is founding Member of **RES4AFRICA** and participates and promotes the **Advanced Training Course 2022** dedicated to African countries in collaboration with Res4Africa Foundation and with the strategic support of Italian Ministry of Foreign Affairs



# **GSE INTERNATIONAL ACTIVITIES**

# International projects and capacity buildings activities

GSE has a relevant experience in promoting cooperation projects and international activities in the clean energy transition and climate sustainability sectors, in particular in the institutional know-how exchange and capacity building fields













GSE is Project Leader in several TWINNING

project financed by
European Commission
to promote capacity
building activities on
Countries which are
developing a favorable
regulatory framework
for renewable energies
and energy efficiency.

Actually we are working on Palestine, Malawi,
Albania.

GSE has hosted TAIEX project financed by European Commission. We have organized study visit on GSE's premises for civil servants from

Lithuania, Türkiye,

Moldova



GSE participates
to EU projects in
the field of RES,
such as the
Concerted Action
on the
implementation
of the RES
directive (CARES,CA-RES2 etc)

GSE participates
in the KnowHow Exchange
Program Training
course dedicated
to Balkan
Regulators in
collaboration
with Italian
Energy Regulator
ARERA

GSE collaborates
with other
Foreign Agencies
and Regulators in
order to promote
sectorial
initiatives and
the exchange of
best-practices
(also set in
specific
Memorandum of

**Understandings**)



Development of modern energy systems through the implementation of key regulatory issues, will contribute to enable and stimulate new investments in RES and clean energy projects



# **GSE INTERNATIONAL ACTIVITIES – TWINNING PROJECTS**

#### **TWINNING**

# Ongoing activities



#### **Palestine**

"Strengthening the Institutional Capacity of the Palestinian Energy And Natural Resources Authority (PENRA) and of The Palestinian Electricity Regulatory Council (PERC)"







### Malawi

"Strengthening the Institutional and Technical Capacity of the Malawi Energy Regulatory Authority (MERA)"



#### **GSE ADDED VALUE**



### Areas of expertise

Evaluation of operational performance of electric utility companies

Collection and analysis of large volumes of data

Drafting energy regulations, electric tariff formulation and incentive programs development

Assessment of distribution companies according to published indicators

Performing benchmarking of electric distribution companies

Economic evaluation of energy efficiency projects/technologies

Technical requirements to connect renewable to distribution systems



# **GSE INTERNATIONAL ACTIVITIES – TWINNING PROJECTS**

#### TWINNING LIGHT



### Georgia

"Assisting Georgian National Energy and Water Supply Regulatory Commission (GNERC) in Creating Enabling Environment for Digitalisation and Developing Digitalisation Strategy"





Completed in february 2023













# Albania

"Strengthening the overall capacity and effectiveness of the Agency for Energy Efficiency"



Completed in march 2024

### Italian organizations involved in Twinning to date















## **GSE INTERNATIONAL ACTIVITIES – TAIEX PROJECTS**



### Lithuania

"Taiex Study Visit on renewable resources (RES) in the field of solar photovoltaic"

• Rome, 28-29 Nov 2022

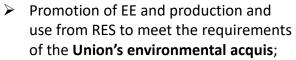
- Process of adaptation to achieve the Renewable Energy Directive II (REDII) targets;
- > Focus: RES, EE and biofuels



# Türkiye

"Taiex Study Visit on the Revised Renewable Energy Directive"

• Rome, 12-14 Dec 2022



> Focus: Solar photovoltaic sector



### Moldova

"Taiex Study Visit on Renewable Energies and Energy Efficiency Programs in Residential Sector"

- Rome, 27-30 Nov 2023
- Strengthening of institutional capacity for the implementation of policies in the energy sector;
- > Focus: EE in residential sector



Memorandum of Understanding between GSE and AEE

Italian organizations involved













