

Speeding-up permitting for grid development

Corrado Gadaleta

Power System Planning and Permitting
Interconnections, System Efficiency and Sustainability

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Strategic environment assessment

Energy transition targets in EU

Permitting has a key role to achieve EU's targets for reducing fossil fuels and climate neutrality



-55% GHG emissions vs 1990 levels 40% RES share in energy consumption within 2030 Climate neutrality within 2050



-40% GHG emissions vs 1990 levels32% RES share in energy consumption32,5% energy efficiency



Extraordinary measures to make EU independent from Russia:

45% RES share in energy consumption **300** bln€ of investments



-62% GHG emissions for the ETS sectors vs 2005 levels65% RES share in energy consumption



-20% GHG emission vs 1990 levels20% RES share in energy consumption20% energy efficiency

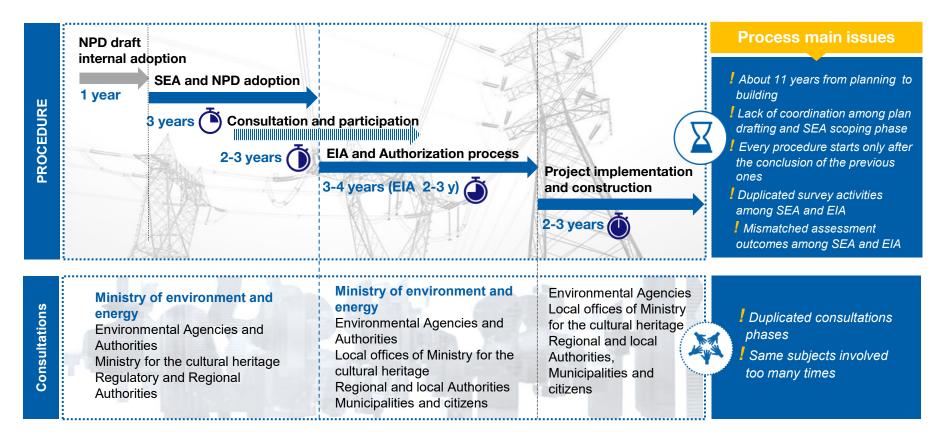
EU released **Recommendations**, **Regulations and Directives** aimed to **simplify permitting processes**. The measures proposed are mainly directed on:

- Removal of administrative obstacles
- Fix a clear time framework for permitting processes
- Detect types of interventions to deregulate
- Streamline and empower effectiveness of participation
- Address PPAs to speed-up permit granting
- Avoid duplicate procedures and assessments
- Promote planning for suitable areas for renewables, grid development, storage plants.
- √ Recommendation and guidance document on permit-granting processes and PPAs
- ✓ Guidance to EU countries on good practices to speed-up permit-granting procedures and Power Purchase Agreements
- ✓ Dir (EU) 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources
- √ Reg (EU) 2022/869 of 30 May 2022 on Guidelines for trans-European energy infrastructure
- √ Reg (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy
- ✓ Commission Recommendation of 13.5.2024 on speeding up permitgranting procedures for renewable energy and related infrastructure projects {SWD(2024) 124 final} - {SWD(2024) 333 final}
- ✓ Commission staff working document Guidance on designating renewables acceleration areas {C(2024) 2660 final} {SWD(2024) 333 final}



From the planning to the construction of Grid development projects in Italy

Focus on permitting steps: What was before the adoption of new legislative packages?





Beyond the transposition of new legislative packages

Activities implemented by Terna for speeding-up permitting

Procedure surveying

- Analysis of needs for the identification of regulatory changes to implement for the simplification/acceleration of the processes
- Bottlenecks
- Overlapping and duplicate steps or requirements
- Exceeding timings or down times
- Permitting effort compared to the complexity of intervention

Process management optimization

- Better coordination of proceedings and activities
- Permit strategy to take advantages of new legislative packages (deregulations, speeding up)
- Intern early-stage assessment of interventions (permitting, timing and environment feasibility, social acceptance)



Advocacy vs Authorities

- Identification of future regulatory paths for further simplification proposals
- Participation and technical contribution to government bodies in the development of new regulatory proposals
- Monitoring of the legislative process underway
- Positioning of the Company on permitting issues and troubles

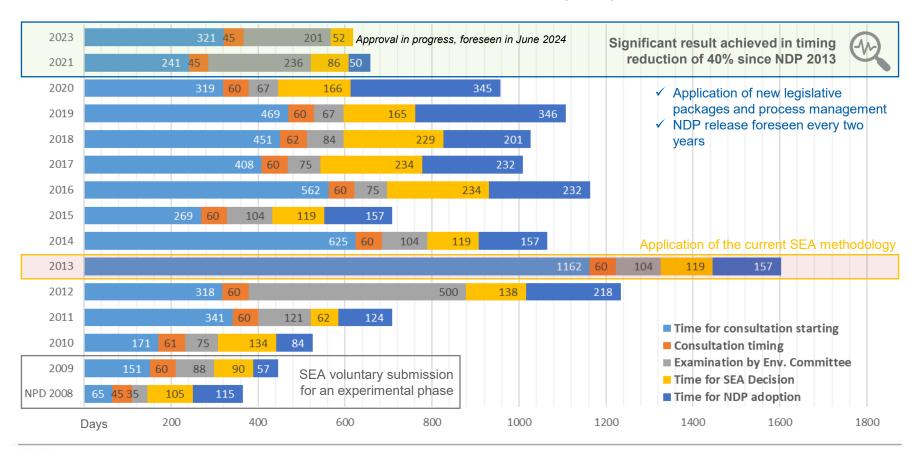
Preliminary engagement and follow-up

- Technical board with competent Authorities
- Open channel with competent Ministry during authorization procedures
- Presentation to the Authorities of new Plans and interventions
- Relational continuity with Ministry and environmental assessment committee, about innovations, integrations needs, troubles



Timing insights for NDPs adoption

Time series trends for the conclusion of SEA and Plan adoption process





Legislative improvements for the adoption of National Grid Development Plan



- □ Reducing number Strategic Environment Assessment (SEA) procedures
- ☐ Cutting SEA conclusion timing and NDP adoption timing
- ☐ Decoupling Plan adoption timing from grid projects approval timing
- ☐ Speed-up the development of grid
- NDP must be presented every two years
- Fixed maximum deadline for NDP adoption procedure in 180 day
- (from the submission of the complete NDP to the Authorities)
- ✓ Possibility to submit for authorization some types of grid projects and interventions (NECPs* compliant) before NDP adoption
- ✓ Cutting of each step deadline of the SEA procedure



Measures provided in the adopted new legislative packages

Before latest legislative packages / Average timing for NDP adoption = **3 years**

After / Average timing for NDP adoption = **1,5 years**

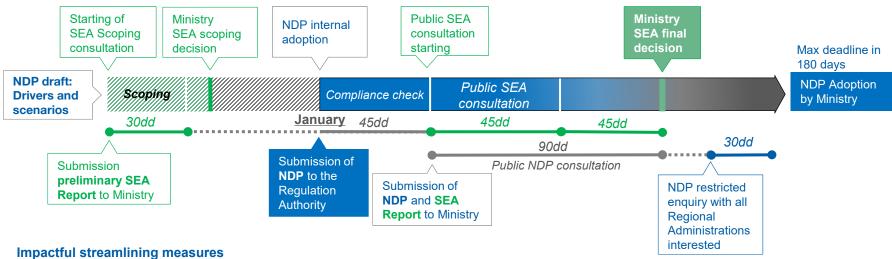


Timeline process for SEA and NDP adoption according to the new law timeframe

Current management of NDP adoption process

SEA Report is drafted to be a key part of National Development Plan (NDP)

- ✓ Better integration of sustainability targets and public requests in assessment of potential effects in territories interested by grid development needs
- ✓ The SEA procedure and the path for the plan adoption is now overlapped in timings and steps



- ✓ Reduced deadlines of all SEA steps (from 60 to 45 days)
- ✓ Fixed deadline for NDP adoption: 180 days
- ✓ Possibility to submit some interventions to the Authorization process, before Plan adoption



Legislative improvements for the approval of Grid Development Projects



- □ Reduce the number of authorization procedures
- ☐ Increase the use of faster and simplified authorizations procedures
- ☐ Speed up the delivery of interventions

- Presumption of overriding public interest for grid development and renewable energy projects
- ✓ Transposition in Italian law of Regulation (EU) 2022/2577 possibility, for those grid projects included in Plans with concluded SEA, to be excluded from EIA
- ✓ Detection of many subtypes of grid actions to address towards a simple Notification of Work Commencement Certified (DILA)
- ✓ Detection of many types or subtypes of grid interventions excluded from EIA field



Measures provided in the adopted new legislative packages

Before latest legislative packages / Average timing for EIA and Authorization = **5 years**

After / Average timing without EIA = 2 years of potential savings / Notification (DILA) = **Direct**



Case study: SEA methodology for NDP 2023 assessment

Application of the new legislative packages for streamline assessment and permitting process of Hypergrid projects

NDP strategy

- Promote energy transition and RES integration
- Limit soil consumption
- Reuse of existing assets
- Reuse of industrial areas
- Avoid the modification of further landscapes

SEA approach

projects

Address the implementation of NPD to detect the best sustainability solutions for a wide reconstruction of existing grid assets, providing a deep assessment of potential impacts. Create the best conditions for speeding-up permitting of HG

Reuse and upgrading of existing assets to improve transmission capacity

Actions for Hypergrid project :

Rebuilding existing backbones with conversion in DC alongside existing lines

Detection of specific survey corridor for SEA characterization and environment assessment





Streamline package of Italian law

Rebuilding the lines in a range of 60 m from the side of existing tracks, is now subjected to a simple Notification (less time spending), bypassing so the single authorization procedure

Reg. EU 2022_2577 (framework to accelerate the deployment of RES) Possibility to exclude grid projects included in NDP with concluded SEA, from EIA. In SEA is analyzed a larger buffer area of 1 km from each side of existing track to add more flexibility in case of alternative track shift (design phase).





Forthcoming measures for speeding-up permitting

What's going on: Transposition of Renewable energy directive - RED III

In Italy, the previous Directive RED II is transposed as legislative Decree: It state each Region must identify suitable areas for RES deployment, in detail

In the meantime (Regional executive decrees not yet issued), Legislation allows to consider as suitable areas the followings:

- artificial and built surfaces (PV only)
- transport infrastructure and their direct surroundings (PV only)
- waste sites, industrial sites, decommissioned mines, degraded land
- Existing renewable plant sites also with possibility for limited increasing (20%)

Incoming legislative packages to streamline authorization processes and timings:

- eliminate unnecessary administrative burdens
- deregulate small deployments, variations and repowering of existing plants
- limit the application of certain landscape constraints

The revised Directive entered into force in November 2023.

There will be an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some provisions related to permitting for renewables.

Key facts



Global leader

EU leads technology development in renewables

21.8%

share of renewables in EU energy consumption 2021

at least 42.5%

the new binding renewable energy target for 2030

RED III Relevant measures for grid and renewables

Increase the renewable energy to 42,5% for further uptake of renewables and easier and faster approval procedures

Designate specific land and sea areas as renewables acceleration areas for the purpose of developing renewables, giving priority to artificial and built surfaces, transport infrastructure, waste sites, industrial sites, decommissioned mines, as well as degraded land

- Deadline for approval procedures, not over 12 months in renewables acceleration areas
- Not over 24 months in other areas
- Overriding public interest and serving public health and safety of renewable energy plants and their related infrastructure



Authorization framework for grid development actions

Overview of current permitting procedures

TSO action types for the development of power grid	Constraints	Environment assessment	Type of Authorization
New power stations		No	Single authorization* (AU)
Internal development of existing power stations	Up to 30% volume increase for non- machine buildings	No	Notification (DILA)
New overhead powerlines	Over 10 km length	EIA	Single authorization (AU)
New overhead powerlines / Reconstruction and upgrading of existing lines for the integration of renewable energy into the electricity system	If included in NDP with SEA concluded. If rebuild within 60 m from existing track line	No	Notification (DILA)
Reconstruction of existing powerlines	If are kept the same operating features of existing	No	Notification (DILA)
Replacing existing overhead powerlines with new underground cables	Within 60 m from existing track line or track shift within 3 km	No	Notification (DILA)
New powerlines underground cable		No	Single authorization (AU)
New powerlines undersea cable		Authorization to modify seabed	Single authorization (AU)
Powerlines maintenance and retrofitting	If are kept the same operating features of existing	No	Notification (DILA)
Powerlines reconstruction or upgrading	If foreseen operating variations Over 60 m from existing track line	EIA	Single authorization (AU)



Authorization framework for renewable plants deployment



Authorization streamline for PV

New plants, repowering or rebuilding in the same site

No authorization for PV up to 20 MW in industrial areas, dismissed mines, waste lands

No authorizations requested for agri-PV deployment

New plants are permitted up to 500m buffer zone from bounded sites

New plants, repowering

No Authorization for new deployments, or revamping of existing up to 20 kW



Authorization streamline for Wind Farm

Offshore plants

New plants permitted up to 3 km buffer zone from protected landscape sites



Authorization streamline for BESS

New storage in power plant sites, industrial areas, dismissed mines

- Since May 2024 in areas classified for agricultural uses will be admitted only agri-PV plants
- Up to 1 MW = Notification (DILA)
- From 1 MW up to 10 MW = Enabling Procedure (PAS)
- Over 20 MW = EIA and Single Authorization (AU)
- If in development areas as detected in plans submitted to SEA concluded = no EIA
- Up to 30 MW = Regional Single Authorization + screening EIA (PAUR)
- Over 30 MW = EIA and Single Authorization (AU)
- ➤ Up to 50 MW, in development areas as detected in Marine Space Management Plan and other plans submitted to SEA = AU only, no EIA
- No authorization for BESS connected to power plant up to 10 MW
- ➤ Enabling Procedure (PAS) no EIA

Deregulation outcomes

RES 2030 target for Italy

+ 70 GW from 2019

Richieste di connessione e target Fit for 55 (GW)



Connection requests

336 GW (+ 266 GW)

Richieste di connessione / FF55 (31/03/2024)

336.38 / 69.89 GW

- 144.84 / 53.69 GW
- **101.14 / 7.70** GW
- 90.41 / 8.50 GW



Thank you for your attention



Backup



Authorization procedures

Single Authorization (AU)

Reference Legislation

☐ D.lgs. 387/2003 - Art. 12☐ D.lgs. 28/2011 - Art. 5☐ D.M. 10.9.2010 (Guidelines)

- "Single authorization" means an authorization involving different customs administrations* (EU's definition)
- Release of the EIA, if required, is a necessary condition of the authorization procedure and, in case of modification of the project, concerns only the examination of variations
- Deadline of the procedure completion: 90 days, besides the VIA procedure (if requested), unless prior screening**

Object

 Projects consisting in construction, upgrading, total or partial reconstruction and reactivation of existing power plants and relevant variations related works

Notification of Work Commencement Certified (DILA)

Reference Legislation

- ☐ Guidelines Par. 11 e 12
- □ D.lgs. n. 28/2011 Art.

- Procedure introduced by the D.L. Simplifications 2020 for some types
 of projects regarding existing plants and amendments of
 authorized projects deemed low/zero environmental impact and without
 urban effects no environmental and landscape assessments
- Statement, including a report signed by a qualified designer and project documents, attesting the compliance of safety, anti-seismic and hygiene standards
- Commencement of work is immediately possible without waiting for the 30 days from the declaration to the Municipality

PV power plant (ground modules): projects that, even with the replacement of modules and other components and by changing the layout of the plant, involve a change in service volumes up to 15% and a change in the maximum height from the ground up to 20%



D.L. Energy - Projects subject to DILA:

- Projects with non-relevant modification of the plant and with increase in installed capacity; further related works do not increase the area already occupied
- New PV plants <1 MW (including related works) and upgrading/ rebuilding/ integral reconstruction in suitable areas, not subject to protection and beyond urban centers which do not require expropriation procedures

Legend

Conferenza dei Servizi (CdS) = meeting of regional authorities



^{*} If the project involves several Regions or Provinces, the AU is issued in agreement with all the Regions/Provinces concerned

** The RES Guidelines provide that, beside any suspensions, the deadline may not exceed 180 days from the date of receipt request

Authorization procedures

Enabling Simplified Procedure (PAS)

Reference Legislation

- ☐ Guidelines- Par. 11 e
- □ D.lgs. 28/2011 Art. 6

- Statement including a report, signed by a licensed designer, and project reports attesting the compatibility of the project with urban planning tools, building regulations and compliance with safety and hygiene standards. The technical connection documents, drawn up by the Network Manager, are attached.
- Environmental procedures remain firm
- Silence equal-assent system: it is possible to have the start of works after 30 days from the statement without having received any feedback from the Municipality (order not to carry out the intended projects has to be motivated)

Object

 Projects consisting in the construction of power plants with not relevant amendments related works



The Municipality can in some circumstances ask to the CdS in order to extend the timing of adoption measure of the authorization – Case study emerged in the appraisal of new initiatives (ex. batteries) regarding the Capacity Market and Fast Reserve matter

Statement of free construction activities

Reference Legislation

- ☐ Guidelines Par. 11 e 12☐ D.lqs. n. 28/2011 Art.
- 6. comma 11

- Simplified authorization process for some types of plants similar to free construction activities
- Commencement of work notification includes a report signed by a qualified designer
- Commencement of work is immediately possible without waiting for the 30 days from the declaration to the Municipality

Example

Wind power plant: projects that, regardless of the resulting capacity, are realized in the same location of the wind farm and involve a minimum reduction in the number of wind turbines compared to those already existing or authorized



DL Energy - Considered as ordinary maintenance projects, not subject to any permit: construction of photovoltaic and thermal solar systems on rooftop buildings or on other structures, except for installations in areas or buildings identified as relevant public matter

