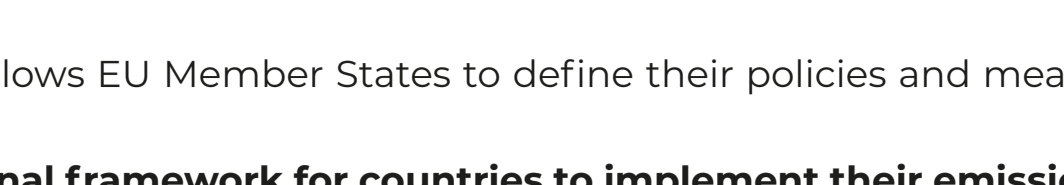


NATIONAL ENERGY AND CLIMATE PLAN (NECP 2024)

PROGRESS REPORT



Progress of the NECP against emission reduction and transition targets.



The NECP is the tool that allows EU Member States to define their policies and measures to achieve energy and climate targets.

The NECP provides a national framework for countries to implement their emission reduction commitments at the national level (Nationally Determined Contributions, NDCs), aligned with the Paris Agreement. It is a document with a 10-year horizon, and it can be updated every five years.

In July 2024, we analysed the final version of the National Energy and Climate Plan (NECP). As highlighted in our analyses, the Plan is insufficient, both in enabling Italy to achieve its climate targets and to seize the opportunities that come with the transition. We also have outlined an alternative approach, with ideas and concrete proposals so that the Plan can be more ambitious and effective, developed in the four macro-sectors of the production and use of energy: the power, building, industry and transport sectors.

We now start the monitoring process of the actions to reach the 2030 climate and energy targets. The benchmark for this first monitoring phase is the publication of the UN Environment Programme Emissions Gap Report (EGR). This report outlines the gap that exists between the estimated level of global emissions based on the current national commitments made in relation to the Paris Agreement (Nationally Determined Contributions, or NDCs) and the level required to achieve the goal of limiting global warming to 1.5°C.

GOVERNANCE

The term "climate governance" refers to the regulatory framework that enables the establishment of climate mitigation and adaptation objectives, as well as the means to achieve them.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">A structured governance	<ul style="list-style-type: none">Long-term strategy update	<ul style="list-style-type: none">Structural Budget Plan	<ul style="list-style-type: none">The Structural Budget Plan does not create the adequate fiscal space to enable a financial strategy for climate policies to be established
<ul style="list-style-type: none">An implementation NECPA system for monitoring, assessment, and the possibility to modify policies	<ul style="list-style-type: none">Government initiatives based on input from ParliamentAdoption of climate legislationCITE or CIPESS resolution for NECP approvalNECP Technical Committee	<ul style="list-style-type: none">Environmental Decree LawDecree Law on Suitable Areas	<ul style="list-style-type: none">The Decree Law on Suitable Areas has made it possible for Sardinia to establish a bill that would classify 99% of its territory as unsuitable for new renewable energy facilities
<ul style="list-style-type: none">A multi-level dialogue between institutions and those involved in implementation	<ul style="list-style-type: none">Multi-level dialogue established		
<ul style="list-style-type: none">Political will to continue on the path towards decarbonisation	<ul style="list-style-type: none">Strategic Environmental Assessment		

FINANCING THE TRANSITION

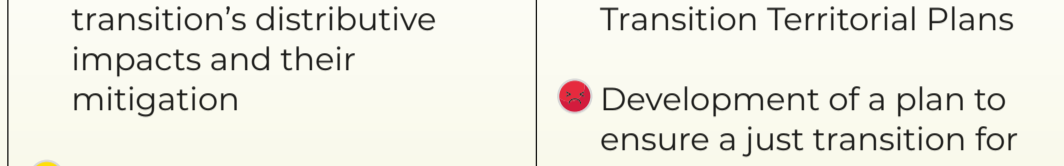
In order to achieve the transition, the volume of necessary financial resources and a strategy for mobilising public and private investment must be defined.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">A strategy for financing and implementing climate policies and the national public spending plan	<ul style="list-style-type: none">Identification of investment volumes and their annual updateIdentification of measures to incentivise private financeModifications to the SACE and CDP guidelinesPlan to gradually phase out the EHS, with an assessment of their socio-economic impactsReview of investment policies and the exclusion of SACE and CDP investments in fossil fuel projects	<ul style="list-style-type: none">Presentation of a detailed financing strategy for each policy	<ul style="list-style-type: none">In the Structural Budget Plan 2025-2029, climate is recognised as one of the factors for economic policy decision-making, but there is no financing strategy that underlines the reciprocal role played by public and private finance

SOCIO-ECONOMIC SUSTAINABILITY

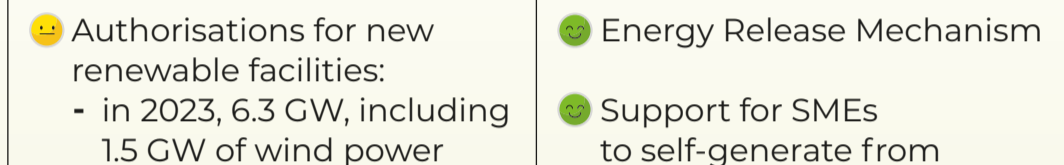
Ensuring that the transition process is socially sustainable requires a consistent political vision, one that establishes policies and measures aimed at addressing the specific needs of individuals.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">Institutional initiatives to assess the socio-economic sustainability of climate policies and measuresMonitoring and evaluation of the transition's social and employment impacts over timeAnalysis of the economic-employment effects of the transition (Just Transition)	<ul style="list-style-type: none">Alignment of public spending with socio-economic and climate objectivesAlignment of taxation with socio-economic and climate objectivesAssessment of the transition's distributive impacts and their mitigationIdentification of indicators to characterise energy poverty	<ul style="list-style-type: none">Review of construction incentives to address the regressiveness of those currently availableDevelopment of Social Climate PlansDevelopment of Just Transition Territorial PlansDevelopment of a plan to ensure a just transition for workers	<ul style="list-style-type: none">The failure to transfer parafiscal taxes into standard taxation prevents an assessment of the final cost of energy from a competitiveness and social sustainability perspectiveParliamentary discussion on employment and Stellantis: the majority motion passed on 25 September mandates the Government to slow the transition, particularly in the automotive sector, without an evaluation of its medium-term impacts

RENEWABLES

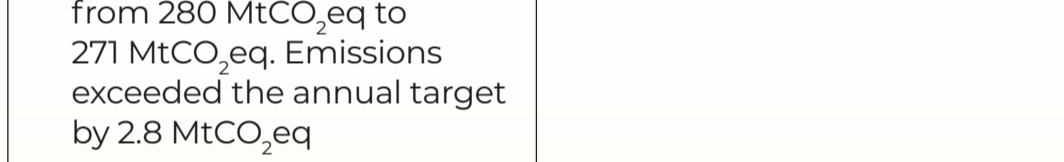
The transition towards renewable energy in the power sector is the first crucial step towards decarbonisation. European legislation set a target of 42.5 percent of power generation to come from renewable energy sources by 2030. According to the commitment that was made by all the G7 countries, including Italy, fossil fuels are phased out from the power system by 2035.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">NECP target for renewable energy growth: 70 GW between 2023 and 2030	<ul style="list-style-type: none">NECP not fully aligned with the G7 target to phase out fossil fuels from the electricity system by 2035Energy sector emissions in 2022 increased by 9 MtCO₂eq compared to 2021, driven by an increased use of coalIn relation to the 70 GW target, Italy has installed 10.6 GW in two years. In 2023, renewables grew by 5.8 GW, another 4.8 GW were added in the first eight months of 2024Authorisations for new renewable facilities:<ul style="list-style-type: none">in 2023, 6.3 GW, including 1.5 GW of wind powerin 2024, authorisations continued to grow – between January and May, facilities for 3 GW gained authorisation, but only 0.3 GW were for wind power	<ul style="list-style-type: none">Implementation of the EU's REDIII regulationsRenewable Energy Consolidating ActDecree Law on Suitable AreasAgriculture Decree LawFER X DecreeMACSE auction mechanism for electrochemical energy storageFER 2 DecreeEnergy Release MechanismSupport for SMEs to self-generate from renewable sources	<ul style="list-style-type: none">The Law on Suitable Areas passed in Sardinia risks blocking the development of renewables in the region and across the country, which, according to the burden-sharing mechanism, should install around 6 GW of renewables by 2030Parliamentary estimates suggest that 99% of the territory could be classified as unsuitable for the installation of new facilities

ELECTRIFICATION OF CONSUMPTION

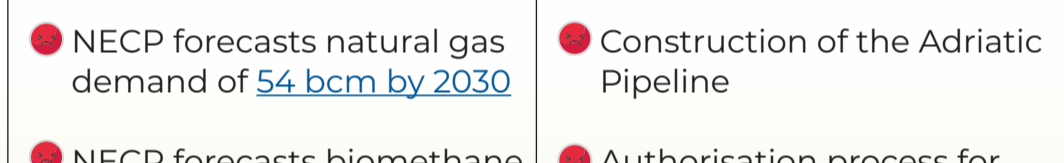
Electrification is a key step in achieving decarbonisation goals in the transport, building and industry sectors.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">For the major energy consuming sectors (excluding heavy industry), Italy's reduction target is 245.6 MtCO₂eq by 2030 (compared to 2005 levels)	<ul style="list-style-type: none">The NECP target does not align with the 43.7% reduction target (compared to 2005 levels) assigned to Italy, which should deliver a reduction of 193.6 MtCO₂eq by 2030, leaving the country exposed to possible infringement procedures and associated finesIn the ESR sectors, emissions decreased between 2021 and 2022, dropping from 280 MtCO₂eq to 271 MtCO₂eq. Emissions exceeded the annual target by 2.8 MtCO₂eqEmissions in the transport sector increased from 102.5 MtCO₂eq in 2021 to 109.4 MtCO₂eq in 2022The share of electricity in final energy consumption in 2022 was 50.6% for the services sector, 39% for industry, just 2.1% for transport, and 18% for the residential sector, with no significant increasesEmissions in the buildings sector decreased from 82 MtCO₂eq to 73 MtCO₂eq due to mild temperatures and possible behavioural changes driven by gas prices	<ul style="list-style-type: none">Revision of the Conto TermicoTransition 5.0Debate on updating the white certificatesDiscussions around the need to reduce electricity bills gained little traction	<ul style="list-style-type: none">Poorly targeted subsidies that support both electrification and fossil fuelsBills subsidies that increase the fiscal imbalance between electricity and gas, thus discouraging measures to save energy or improve efficiency, have not been extended

PHASING OUT GAS

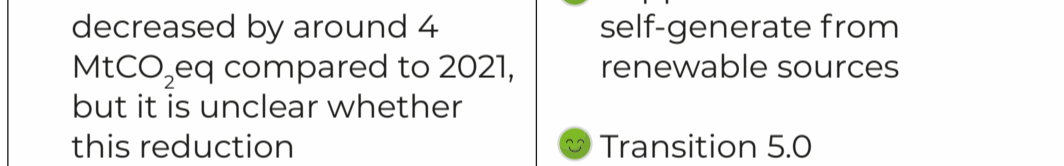
Phasing out natural gas is a prerequisite for achieving climate neutrality in the long term. Italy should establish a strategy for its phase-out.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">Strategy for phasing out gas, with a clear approach and intermediate milestones	<ul style="list-style-type: none">2023: national gas consumption was 61.7 bcm. Reduction of 10% on 2022, stabilising in 2024NECP forecasts natural gas demand of 54 bcm by 2030NECP forecasts biomethane demand of 5 bcm by 2030. In 2023, the demand was 0.26 bcmImplementation of the EU's methane emissions reduction regulation	<ul style="list-style-type: none">Process to double the transport capacity from Azerbaijan through the TAP pipelineConstruction of the Adriatic PipelineAuthorisation process for relocating the Piombino offshore regasification terminal to Vado Ligure	<ul style="list-style-type: none">The analysis by Terna and Snam has been updated, with estimated demand ranging between 54 and 61 bcm in 2030, between 45 and 56 bcm in 2035, and between 35 and 49 bcm in 2040The infrastructures considered in these scenarios suggest a likely overestimation of gas investment needs

INDUSTRY, INNOVATION, WORK

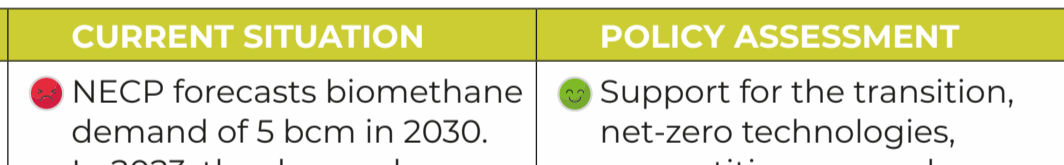
The NECP should have addressed the issue of how to decarbonise manufacturing companies, by focusing on the particular characteristics of the different manufacturing sectors, with the objectives and policies accompanied by financial instruments for managing the social implications of the transition, its impact on employment, and the need for training.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">Decarbonisation plan for industry, detailed for each individual sectorFinancial tools to manage the social implications of the transition, the impacts on employment, and the need for trainingReplace fossil fuels through electrification, use of hydrogen, biomethane, and CCS for process emissions in hard-to-abate sectors	<ul style="list-style-type: none">Emissions for 2022 in the manufacturing and construction sectors decreased by around 4 MtCO₂eq compared to 2021, but it is unclear whether this reduction was structuralIn the ESR sectors, emissions fell from 280 MtCO₂eq in 2021 to 271 MtCO₂eq in 2022, but still exceeded the targets by 2.8 MtCO₂eqOver the 2021-2022 period, total industrial emissions increased from 131 to 136 MtCO₂eq, with a 9 MtCO₂eq rise in the energy sector	<ul style="list-style-type: none">Energy Decree LawSupport for SMEs to self-generate from renewable sourcesTransition 5.0Implementation decree for ETS and ETS2 published, but 50% of the auction proceeds are allocated to the government securities amortisation fundWhite certificatesConto Termico also open to industryConversion of the primary steel production plant to a DRI plant postponed, and maintenance started on blast furnaces 1 and 2 at the Acciaieria d'Italia plant in Taranto (formerly ILVA), currently under extraordinary administrationConsultation process for Italy's industrial strategy (Green Paper)	<ul style="list-style-type: none">Acquisition process for the Acciaieria d'Italia group (formerly ILVA) ongoing

TRANSITION TECHNOLOGIES

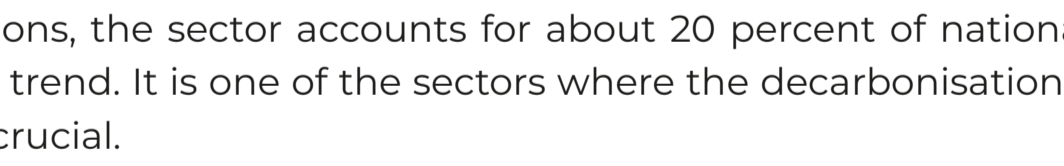
Public spending should be primarily directed towards those technologies that are best suited to meeting the decarbonisation objectives, based on an assessment of their cost effectiveness.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">Develop the following technological areas and lines of action by 2030:<ul style="list-style-type: none">electricity storage (batteries);renewable sources (solar, geothermal, other onshore and offshore renewables);hydrogen;renewable fuels other than hydrogen;nuclear;carbon capture, utilisation and storage (CCUS);grid technologies and digitalisation;critical raw materials and advanced materials for enabling the energy transition and their related supply chains	<ul style="list-style-type: none">NECP forecasts biomethane demand of 5 bcm in 2030. In 2023, the demand was 0.26 bcmEstimated total hydrogen consumption: 721 ktoe by 2030. The MASE tender for electrolyser production assigned just €9 million of the €100 million availableEni outlined the CO₂ storage potential without defining the priority users, usage costs, security and maintenance risks, or the public/private responsibilities for managing the sites	<ul style="list-style-type: none">Support for the transition, net-zero technologies, competitiveness and resilience of strategic supply chainsStrengthening the IPCEI fund for microelectronics, batteries, hydrogen, and digital infrastructureConsultation process for Italy's industrial strategy (Green Paper), which recognises the importance of developing green technologyMASE platform on sustainable nuclear energy and commitment to developing a draft enabling law for the production of nuclear energy from new technologiesEstablishment of a CCS committee within MASEDevelopment of the Terna auction mechanism for procuring electricity storage capacity (MACSE)FER X Decree still under discussion	<ul style="list-style-type: none">CCS facility in Ravenna now operational, but no information available on the CCS system costs

BUILDINGS SECTOR

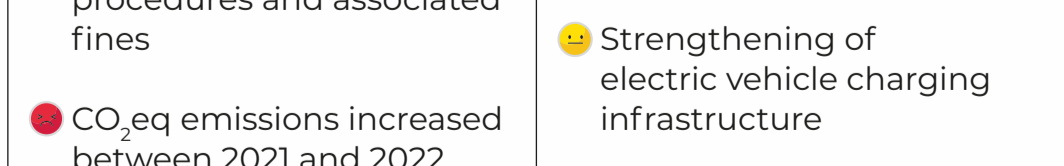
With 74 MtCO₂eq of emissions, the sector accounts for about 20 percent of national emissions and does not show a structural reduction trend. It is one of the sectors where the decarbonisation is more complex and where leverage from the public is crucial.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">In the buildings sector, the NECP targets a 41.6% reduction in emissions by 2030 compared to 2005The EU's Energy Efficiency Directive (EED) objectives: reduce final energy consumption from 112 Mtoe/year in 2022 to 102 Mtoe/year in 2030, with 4 Mtoe/year coming from the buildings sectorEPBD targets for residential buildings: -36% of average energy consumption by 2030, -20-22% by 2035	<ul style="list-style-type: none">Along with other non-ETS sectors, the NECP target for the buildings sector does not align with the EU target of a 43.7% reduction, leaving the country exposed to possible infringement procedures and associated finesEmissions reduced by 11% in 2022 compared to 2021 (from 82 to 73 MtCO₂eq)Reduction of 14% in natural gas consumed between 2021 and 2022The Superbonus scheme generated additional savings of 0.58 Mtoe/year, but there were no significant reductions in emissionsConto Termico: in 2022, requests and incentives decreased compared to previous years (-12% compared to 2021). Installation of renewable heating/cooling systems (biomass, solar, and heat pumps) remained stable, accounting for 74% of the total incentivesThe Government's Structural Budget Plan indicates that between 5.4 and 6 bcm must be upgraded annually, with an annual saving of around 72 ktOeCarbon savings achieved through construction related tax incentives amounted to 1.36 Mtoe/year in 2022 (+147% compared to 2021)According to reports from UNFCCC, the combined effect of the NRRP measures (Superbonus) resulted in a sector emissions reduction of only 1%Sales of heat pumps decreased by 44.1% in 2023 compared to the previous year	<ul style="list-style-type: none">Use of white certificates for the residential sector to (partially) replace tax incentives. Unsuitable for the EU's emissions reduction regulations in 2022: savings of 0.16 Mtoe, against the NECP target of 5 Mtoe by 2030 for tax incentivesA policy framework to achieve the set objectives without clearly specifying which measures and instruments will be usedEnergy efficiency improvements for lower income households or a strategy for upgrading social housingImplementation decree for ETS and ETS2 published, but 50% of the auction proceeds are allocated to the government securities amortisation fundEnergy efficiency improvements for lower income households or a strategy for upgrading social housingImplementation decree for ETS and ETS2 published, but 50% of the auction proceeds are allocated to the government securities amortisation fundReview of the fringe benefits for long-term car rentals to incentivise the take up of electric vehiclesAchievement of biomethane consumption targetsReview of the fringe benefits for long-term car rentals to incentivise the take up of electric vehicles	<ul style="list-style-type: none">Constant changes and uncertainty surrounding the establishment and evolution of construction related tax incentives (Bonus Casa, Ecobonus, and Superbonus) have actually led to a slowdown in energy efficiency upgrades, heat pump installations, and the development of distributed photovoltaic systems in the buildings sector, demonstrating a clear need for a stable and secure incentive framework over the medium-term

TRANSPORT SECTOR

Without the decarbonisation of the transport sector, it will be impossible to achieve climate neutrality by 2050. Today, the sector accounts for 24.7 percent of Italy's GHG emissions, with emissions of 109.4 MtCO₂eq, showing an increase compared to previous years.



ITALY'S OBJECTIVES	CURRENT SITUATION	POLICY ASSESSMENT	EXAMPLES
<ul style="list-style-type: none">Transport sector target for 2030: 72 MtCO₂eq, with energy consumption of 33.1 MtoeTargets for private road vehicles: 4.3 million battery electric vehicles (BEVs) and 2.3 million plug-in hybrid electric vehicles (PHEVs)	<ul style="list-style-type: none">Along with other non-ETS sectors, the NECP target for the transport sector does not align with the EU target of a 43.7% reduction, leaving the country exposed to possible infringement procedures and associated finesCO₂eq emissions increased between 2021 and 2022 from 102.5 MtCO₂eq to 109.4 MtCO₂eq (+6.7%)Renewable energy consumption in 2022, the development trajectory for FER-T consumption was at just 26% of the target (1.86 vs 7.3 Mtoe), mostly down to liquid biofuels. Biomethane consumption remains limitedRoad vehicle numbers compared to the EU average: 40 million vehicles, 684 cars per 1,000 residents, the EU average is 560Number of BEVs compared to the NECP targets: 261,000 vehicles (+41,000 compared to 31 December 2023)Number of electric charging stations nationwide: 57,000	<ul style="list-style-type: none">Management of the €950 million allocated by the latest DPCM for the automotive sectorReview of environmentally harmful subsidies for fuelsStrengthening of electric vehicle charging infrastructureBiofuels targetsAchievement of biomethane consumption targetsReview of the fringe benefits for long-term car rentals to incentivise the take up of electric vehicles	<ul style="list-style-type: none">The position taken by the Government in relation to reviewing the CO₂ emissions standards regulation for cars does not align with the decarbonisation objectives for passenger vehicles and does not support the sector's transition to electric technologies, exposing the country to the risk of becoming less competitive internationally.The demand for biomethane consumption certificates remains below expectations. Estimated installed production capacity is around 570 million cubic metres per year, one-tenth of the overall target set by the NECP

- The measure is not effective
- The measure is mentioned but not implemented
- The measure is implemented and effective