Session SBI50 (2019)

Session starts: 15-03-2019 00:00:00 [GMT+1]
Session ends: 08-06-2019 23:59:59 [GMT+1]

Exported from Session final result section

Question by Canada at Friday, 12 April 2019

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Only lower sensitivity analysis

What was the justification for focussing solely on parameter/drivers values lower than in the WM scenario when conducting sensitivity analysis?

Answer by Italy, Friday, 07 June 2019

As also explained in para 5.5 of NC7, the sensitivity analysis has been performed with values for macroeconomic parameters different from those used to carry out the WM projections. This choice was made based on the evidence that the most recent national statistics available in 2017 on population and GDP showed a lower growth rate, if compared to PRIMES2016 reference scenario (Tab 5.24 of NC7).

As those exogenous parameters may lead to sensible differences in the model results, it appeared appropriate and relevant to assess how the emissions projections changed when changing macroeconomic assumptions.

This scenario is relevant for two reasons: if, on one side, the lower economic and population growth imply lower values for projected emissions, the worse economic conditions affect the ability to further reduce emissions as the amount of resources available for mitigation options may be sensibly lower. Moreover, lower international prices for carbon and fuels were applied in order to simulate worse conditions in terms of fossil fuels preference against renewable sources.

The sensitivity scenario aims at representing the evolution of GHG in a different set of assumptions in order to highlight potential challenges, which may arise from a different evolution of socio-economic parameters, which play a key role in the modelling exercise and can help in preempting potential solutions.

Question by Australia at Friday, 12 April 2019

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: EV charging infrastructure

How does Italy plan to promote and support the development of charging infrastructure for electric vehicles?

Answer by Italy, Friday, 07 June 2019

The overall policy framework to implement the plan for the development of alternative fuels infrastructure as electric car charging stations and natural gas filling stations is represented by the DAFI directive 2014/94/EU, which was transposed into national legislation. According to the DAFI directive the Ministry of Infrastructures and Transport has adopted in the 2015 the PNire (National Plan for Electric charging Infrastructure, http://www.governo.it/sites/governo.it/files/PNire.pdf, available in Italian only)). The PNire defines the necessary steps to take in order to develop the infrastructure and allow the penetration of electric vehicles. It also defines the guidelines to guarantee the uniform development of electric vehicle charging services in the national territory.

Some examples of policies set up in order to facilitate and support the development of charging infrastructure are represented by:

- a simplification of the permitting documentation for the realization of charging infrastructure in private buildings and areas (Ministerial Decree 3rd August 2017)
- The development and financing of a Strategic National Plan for public transportation, which foresees 3.7 billion euros of public expenditure for the renewal of both vehicles for public transportation and for the development of the infrastructure for alternative fuels.

Question by Japan at Friday, 12 April 2019

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: preservation of the employment associated with coal phase out

According to the information on policies and measures for cogeneration and district heating shown on page 42 of BR3, it is stated that the gradual coal phase out by 2025 has been envisaged in Italy and this measure should be implemented taking into account the preservation of the employment. Could you let us know if there is information on specific employment preservation measures accompanying the coal phase-out?

Answer by Italy, Friday, 07 June 2019

The definition of the pathway for the coal phase out is on-going in cooperation with the relevant operators and taking in account all the specific circumstances including permits procedures, decommissioning, and social economic impacts.

A group of representatives from the institutions (Ministry for economic development, Ministry for the environment), together with representatives of the owners of the coal power plants as well as representatives from the manager of the national power grid (TERNA) meet periodically in order to define the necessary steps to take for the implementation of the ‘coal phase out’ provision. Based on the inputs of the participants the group aims at defining a time schedule for the phase out of coal power plants by 2025, also taking in due account permitting procedures and potential issues on security of supply.

Furthermore, this group is also responsible of meeting the trade unions and figure out the solutions for the employment preservation.

Question by Australia at Friday, 12 April 2019

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Coal phase out

Could Italy please provide an update on the status of its envisaged gradual coal phase out (as reported on page 42), including any planned or implemented policies and strategies?

Answer by Italy, Friday, 07 June 2019

The definition of the pathway for the coal phase out is on-going in cooperation with the relevant operators and taking in account all the specific circumstances including permits procedures, decommissioning, and social economic impacts.

A group of representatives from the institutions (Ministry for economic development, Ministry for the environment), together with representatives of the owners of the coal power plants as well as representatives from the manager of the national power grid (TERNA) meet periodically in order to define the necessary steps to take for the implementation of the ‘coal phase out’ provision. Based on the inputs of the participants the group aims at defining a time schedule for the phase out of coal power plants by 2025, also taking in due account permitting procedures and potential issues on security of supply.

In particular, the manager of the national power grid (TERNA) is expected to provide a detailed esteem of the capacity to be substituted zone by zone in order to ensure security of supply.

Question by Japan at Friday, 12 April 2019

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Monitoring and evaluation of progress with climate policies and measures

The overview of the monitoring and evaluation of progress with climate policies and measures in Italy is reported on page 31 of BR3. Could you provide more detailed information on its monitoring and evaluation approach, including what information is collected, how it is collected and evaluated.

Answer by Italy, Friday, 07 June 2019

As reported in the BR3, according with law No 79/2016 (article 6), IMELS ensures the collection of information related to GHG emissions and other information concerning climate change from all the relevant national institutions, as basic data to assess and improve emission estimations and projections as well as main policies at sectoral level. IMELS also updates the document on the state of implementation of commitments to reduce GHG emissions, through an annex to the Financial Law, according to L. 39/2011, art. 2, c. 9.

The monitoring and evaluation of progress on policies and measures to cut greenhouse emissions are reported in the documents submitted every two years by Member States to the European Commission under the Monitoring Mechanism Regulation (Regulation 525/2013). Moreover, the Manager for Energy Services (GSE) sends to the European Commission the "Progress Report under Art. 22 of the 2009/28/EU Directive") every two years, where an ex-post assessments of the most relevant national measures related to renewable energy use and energy efficiency are reported. The document is available at the following address: https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports. These reporting requirements have been reviewed through Regulation EU 2018/1999 on the Governance of Energy Union (please, refer to https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union for the details).

Concerning the evaluation of the GHG projections, as of 2016, an expert group made of representatives coming from different institutions (Ministry of Environment, Land and Sea; Ministry of Economic Development; Ministry of Economy and Finance; Ministry of Agriculture; Ministry of Transport and Infrastructures) and research institutes (ISPRA – National Institute for Environmental Protection and Research (linked to the Ministry of Environment); ENEA – National Agency for New Technologies, Energy and Sustainable Economic Development (linked to the Ministry of Economic Development); ISTAT – National Institute of Statistics; The Italian Regulatory Authority for Electricity, Gas and Water – the independent regulatory body of the energy markets and the integrated water services) was set up. This group is meant to continuously update the GHG and energy projection modelling in order to be able to set the appropriate policies and measures to put in place to be able to reach the GHG reduction targets as well as the RES and EE increase targets. Data are collected and processed through the TIMES model which is a bottom-up, demand-driven model in which each technology is identified by technical and economic parameters and the production of a

good is conditioned to the effective demand by end-users. The energy system as simulated is composed by a number of different sectors and subsectors (e.g. electricity production, industrial activities, residential buildings, etc.), each one consisting of a set of technologies connected by input-output linear relationships. Inputs and outputs can be energy carriers, materials, emissions or requests for services. The structure of energy scenarios is defined by variables and equations determined by input data constituting the regional database. The database contains qualitative and quantitative data describing the interaction between different components of the energy system.

The effect of individual PaMs reported has been elaborated with a methodology developed by ENEA available here:

http://old.enea.it/produzione_scientifica/pdf_volumi/V2010_QSN.pdf

The methodology is based on specific target or planned economic sources. If the measure involves a target, as White certificates or Green certificates, the stepwise trend to reach the target is elaborated. The emission avoided are estimated calculating the level of the target parameter(electricity or natural gas saving, RES in electricity generation) multiplied by the average emission factor of fuel mix involved by the measure. If the measure is financial, as for subsidies to renewable capacity, the hypothetical renewable new power capacity is estimated, considering specific investment costs and other technological parameters. The emissions avoided are calculated considering the estimated production multiplied by the average emission from the thermoelectric plants.

It is a quite rough esteem that anyway allows to set assumptions and gathers parameters, as the mentioned investment costs, useful to set up the model adopted to elaborate projections.

The integrated impacts of the measures is the outcome of the model, which evaluates the impact of packages of measures. This approach avoids double counting of effects, considers rebound effect and reduces other discrepancies.

Question by Australia at Friday, 12 April 2019

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Transport emissions decline

CTF Table 1 shows that transport emissions have steadily declined since 2005. What were the drivers of this decline, including any relevant policies and strategies?

Answer by Italy, Friday, 07 June 2019

The decline in transport emissions reflects the trend observed in fuel consumption for road transportation which accounts for more than 90% of GHG sectoral emissions. The mobility demand and, in particular, the road transportation share have increased in the period from 1990 to 2017, although the emissions trend shows a decrease in recent years.

In 2017 the transport sector is responsible for 23.3% of total national GHG emissions and for 28.8% of the GHG energy sector emissions.

Emissions show a decrease of about 2.7 % from 1990 to 2017, and this results from an increase of about 26.7% from 1990 to 2007 and from a decrease of about -23.2% from 2007 to 2017.

In 2008 and 2009 a drop of GHG emissions is observed, due to a sharp reduction of gasoline and diesel fuel consumption for road transport, as a consequence of the economic downturn contributing to the reduction of movements of passengers and goods. A further drop is observed in 2012 explained both by some residue of the economic crisis, and by the penetration in the market of low consumption vehicles. Despite an inversion of the trend between 2013 and 2014, a further reduction is observed in last three years.

As regards policies and strategies about CO2, the performance of the new cars has constantly been improving over the years, as a result of the measures adopted at European level.

In the legislative framework, a fundamental role in CO_2 reduction process in the transport sector was played by the entry into force of the Regulation (EC) No. 443/2009 for cars and Regulation No. 510/2011 for light duty vehicles. Both regulations were recently updated and 'merged' into a unique piece of legislation (for further details please, look at https://ec.europa.eu/clima/policies/transport/vehicles_en).

The Regulation established a Community target regarding CO2 emissions of new cars sold annually in the Community equal to 130 g CO2/km, referring to the average of all new cars sold in 2012. This target had to be achieved through technological improvements at engine level, establishing also an additional reduction of 10g/km to be reached by complementary technical measures such as tires, fuels, etc. The obligations for manufacturers have been applied to 65% of their fleets since January 2012 and 75% since January 2013, 80% since January 2014 and applied 100% from 2015. An EU target of 95 g of CO2/km to be achieved by 2020 has also been introduced. In order to achieve the target, the Regulation sets limit values for specific CO_2 emissions from cars as a direct function of their mass and establishes penalties for non-compliant manufacturers.

Finally, further implemented measures, are the Strategic National Plan (see also answer to question n. 4) has identified infrastructural measures (high capacity and high speed networks, and improvement of regional networks for commuting) and management measures regarding the enhancement of the road urban public transport network and more an incentive system for at renewal the vehicle fleet.

Question by United States of America at Friday, 12 April 2019

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Use of biofuels

To promote the mandatory use of biofuels in Italy, a minimum quota of biofuels was set to 5.75% of the total sold from 2010 onwards (target 4.5% to 2012 in transportation sector), while Legislative Decree 28/2011 established a 10% objective of biofuel use for transport by 2020.

· Is the main source of these biofuels projected to be domestically produced or imported?

· Is the source of the biofuels likely to be impacted by Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (e.g., concerns over indirect land use-change impacts)?

Answer by Italy, Friday, 07 June 2019

In 2017, which represents the latest available data, 87% of biofuels sold in Italy (1.2 million tons biofuels, 97% of which is represented by biodiesel) was produced in Europe. During the same year, almost 30% of all sustainable biofuels sold in the national territory were produced in Italy (30.4% in 2016). The residual amount was mainly imported from Spain (27.5%), Indonesia (11.8%), the Netherlands (7.3%) and Austria (6.8%).

Referring to 2017, concerning raw material for the production of biofuels, 9.5% of sustainable biofuels was produced in Italy. Raw materials mainly come from Indonesia (37%), Spain (14.4%) and France (6%). Broadly, 60% of raw materials used for biofuels production come from EU countries while the remaining 40% comes from non-EU countries. (https://www.gse.it/dati-e-scenari/statistiche).

On the concerns over indirect land use-change impacts (ILUC) or other adverse potential impacts deriving from the use/incentive of biofuels to reduce greenhouse gas emissions, the RES Directive (EU) 2018/2001 reinforces the sustainability criteria of bioenergy through different provisions.

It sets limits on high ILUC-risk biofuels, bioliquids and biomass fuels with a significant expansion in land with high carbon stock. These limits will affect the amount of these fuels that Member States can count towards their national targets when calculating the overall national share of renewables and the share of renewables in transport. Member states will still be able to use (and import) fuels covered by these limits, but they will not be able to include these volumes when calculating the extent to which they have fulfilled their renewable targets.

The directive also introduces an exemption from these limits for biofuels, bioliquids and biomass fuels certified as low ILUC-risk.

For the implementation of this approach, as required by the directive, the Commission has adopted the Delegated Regulation (EU) 2019/807, which sets out specific criteria both for:

- determining the high ILUC-risk feedstock for which a significant expansion of the production area into land with high carbon stock is observed; and
- certifying low ILUC-risk biofuels, bioliquids and biomass fuels.

Please refer to https://ec.europa.eu/energy/en/topics/renewable-energy/biofuels/sustainability-criteria for further details.

Furthermore, within the target for biofuels in the transport sector, more space will be given to the use of the, so called, 'advanced' biofuels which are produced from recovered materials and waste, according to the circular economy principles, thus giving a boost to the national production of bio-based fuels. Among those, it is worth mentioning bio-methane, which is mainly produced on the national territory and for which Italy has set an incentive scheme (Ministerial Decree March, 2nd 2018) in order to accelerate its deployment.

Question by United States of America at Friday, 12 April 2019

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: White Certificates system

The white certificates system for energy efficiency is a key national-level policy that Italy introduced to achieve its targets under the EU Effort-Sharing Directive (ESD) and domestic emission reduction targets. Furthermore, the extension of the white certificates system has been identified as critical for Italy to attain its 2020 emission reduction target.

· Are there any lessons learned from implementation of the program that other countries could benefit from (e.g., studies on cost effectiveness or cost savings)?

· The BR3 indicates that a further extension of the white certificates system objective through 2030 is foreseeable and the extension has been considered as a planned measure. Has there been any progress on this extension?

Answer by Italy, Friday, 07 June 2019

The White Certificate System (also called Energy Efficiency Certificate System, EEC) was introduced by a ministerial decree in April 24th, 2001, and modified several times in order to tailor it to the required energy efficiency objectives, mainly deriving from the necessity of complying to the EU legislation on energy efficiency. The EEC is an incentive mechanism based on a mandatory primary energy saving scheme for electricity and natural gas distributors (those with more than 50,000 end customers are in the scope of the legislation).The parties can fulfill the savings obligation in two ways:

1. realizing the energy efficiency projects admitted to the mechanism, directly or through

the controlled companies;

2. purchasing the white certificates from other parties admitted by the mechanism.

For each ton of oil equivalent saved thanks to the implementation of the energy efficiency intervention, a certificate is issued by the Energy Market Manager (GME), throughout its useful life established by the law for each type of project (from 3 to 10 years).

The volunteers and the obliged parties exchange the certificates on the market platform managed by the GME or through bilateral negotiations.

Being a market-based scheme, it naturally promote the technologies and the sectors where it is, at the same time, more effective and profitable to invest. Since its institution, the EEC scheme proved be to be the most cost-effective policy put in place to incentivize energy efficiency. Costs incurred by the actors involved for each kWh saved is 2.9 euro cents for White Certificates, while it is 8.6 for the Ecobonus (tax relief for refurbishing according to energy efficiency criteria), compared with 32 for renewable electric sources (source http://www.enea.it/it/seguici/pubblicazioni/edizioni-enea/2018/rapporto-annuale-efficienza-energetica-2018).

It has also the advantage of not involving public financial resources, unlike other RES's schemes such as Feed-in Tariffs (applied for RES sources in Italy).

During the period 2011-2017, more than 35% of energy savings generated from active policies were due to the EEC scheme. (Rapporto Annuale efficienza energetica 2018, http://www.enea.it/it/seguici/pubblicazioni/edizioni-enea/2018/rapporto-annuale-efficienza-energetica-2018).

The participation to the scheme by the private sector was made easier thanks to the involvement of Energy Service Companies (ESCo) certified according to UNI CEI 11352, which could act as intermediaries and facilitate the participation to the scheme especially by SMEs leading to growth and local economic development.

· The BR3 indicates that a further extension of the white certificates system objective

through 2030 is foreseeable and the extension has been considered as a planned measure.Has there been any progress on this extension?

Pursuant to Regulation (EU) 2018/1999 of the European Parliament and of the Council on the Governance of the Energy Union and Climate Action, Italy has submitted to the European Commission the first draft Integrated National Energy and Climate Plan at the end of 2018. (https://www.mise.gov.it/images/stories/documenti/Proposta_di_Piano_Nazionale_Integrato_per_Energia_e_il_Clima_Italiano.pdf).

According to the draft plan, a further extension of EEC system was envisaged up to 2030, expecting a cumulative final energy saving from this measure of about 15 Mtep.

Although included, the measure cannot be considered as decided yet as the draft national plan has undergone an extensive public consultation and it is being subject to the Strategic Environmental Assessment (SEA) procedure in line with directive (2001/42/EC). Furthermore, the draft plan will be subject to the assessment by the European Commission. The output of all of those processes will feed into the finalization of the National Energy and Climate Plan, which will identify more precisely policies and measures that Italy will need to put in place in order to reach its targets in terms of GHG reduction as well as RES increase and EE increase.

Question by Turkey at Thursday, 11 April 2019

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Rationalization of nitrogen fertilizers

Could Italy provide more information on its policy & measure regarding the "rationalization of nitrogen fertilizers" which started in 2007? How was the process implemented in detail? Moreover, has there been anything used instead of nitrogen fertilizers in order to satisfy the demand thereof and by which means?

[Based mainly on the information given in Paragraph 38 of the document FCCC/TRR.3/ITA]

Answer by Italy, Friday, 07 June 2019

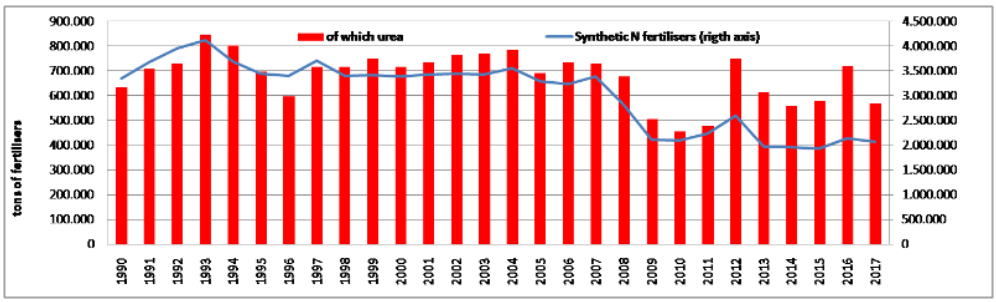
With this expression Italy indicates a fertilization system that makes the supply of nitrogen fertilizers more efficient and that reduces the amount of environmental risk related to their use, in compliance with environmental regulations, such as the Code of good agricultural practice (COGAP) for the protection of water from nitrates (Mipaaf decree of 19 April 1999), drawn up within the framework of European Directive 91/676, concerning the protection of water from pollution caused by nitrates from agricultural sources.

This system provides, in addition to an efficient and rational use of synthetic nitrogen fertilizers, various actions: use of slow-release nitrogen fertilizers; use of organic fertilizers and soil conditioners; development of organic farming; dissemination of fertilizer distribution techniques that are efficient and sustainable for the environment and for agricultural production. Such interventions, in general, are incentivized within the CAP, through the RDPs, and these are measures provided for by national agreements and protocols, such as the Bacino Padano Agreement and the Mipaaft guidelines, containing measures for reducing

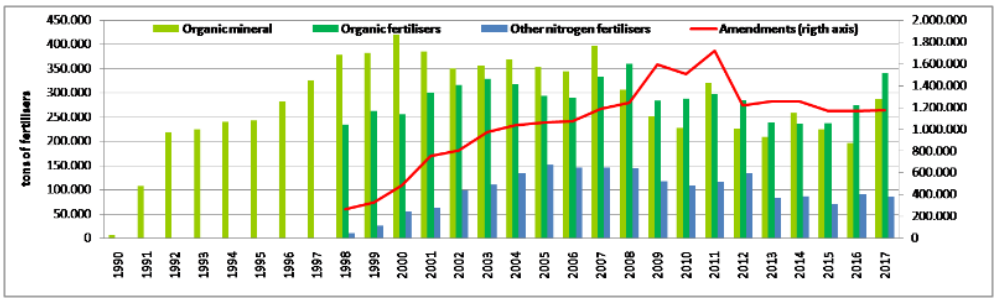
emissions of agricultural and livestock activities.

Slow-release nitrogen fertilizers are products formulated to modulate the availability of the nutrient element over time, to optimize the absorption of the nitrogen given to the plant, reducing the quantities that can be used and the losses of nitrogen by leaching, runoff and volatilization (-30% reduction in ammonia emissions compared to the application of urea, according to the 2014 UNECE guidelines Options for ammonia mitigation).

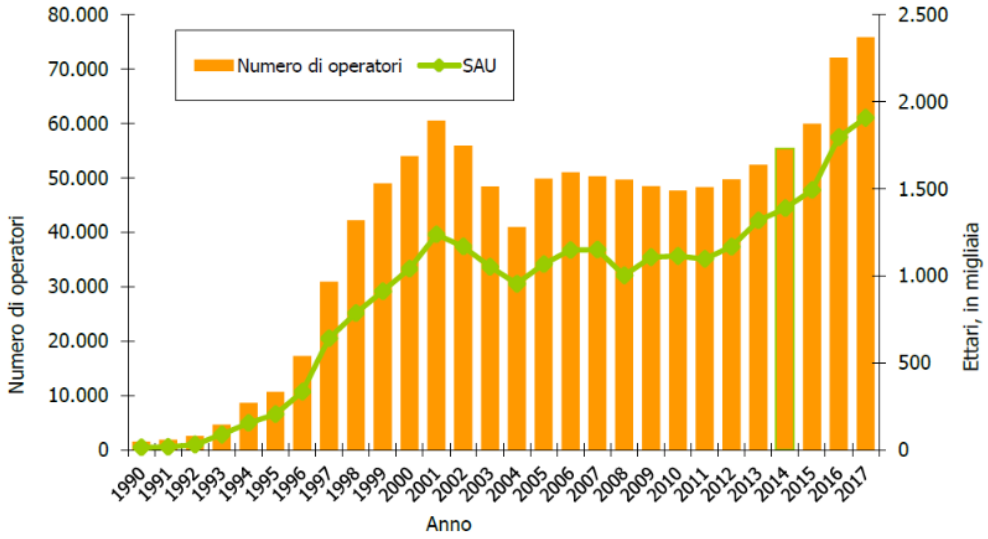
In the following figure, it can be seen how the use of synthetic nitrogen fertilizers has been reduced in the last ten years, also due to the economic crisis that began in Italy in 2008 and its impact in agriculture. This also applies to urea: although consumption peaks can be observed due to cyclical trends linked to the relative market, in 2009-2017 the consumption of urea was on average lower than the pre-crisis period.



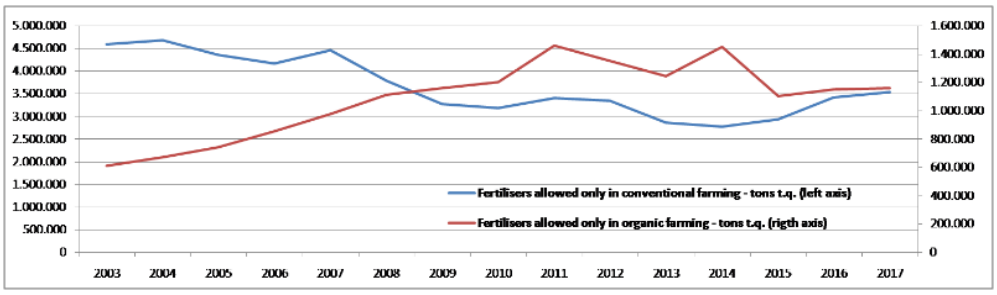
The following figure contains information on the fertilizers used to rationalize synthetic nitrogen fertilizers. In particular, we can note the trend of organic-mineral fertilizers (products composed of organic and mineral fertilizers) and of organic fertilizers (whose data are only available since 1998), whose consumption has been reduced since 2009, but which in the last two years seems to be recovering. The red line, shown in the graph, indicates the increase in soil improvers, consisting essentially of the use of compost, in obvious contrast to the trend of synthetic nitrogen fertilizers. For completeness, the graph also shows the trend of "other nitrogenous fertilizers" which include slow-release nitrogen forms, for which unfortunately no separate data are available.



The annual trend in the consumption of organic fertilizers is also explained by the development of organic farming. With respect to this, the following graph contains the historical series starting from 1990 of the organic farms and biological surfaces in Italy (data from the National Information System on Organic Agriculture - SINAB). After the initial hike in the years prior to 2000, the data on organic farming came to a standstill and remained stationary for a few years, probably also due to the saturation of demand for the high costs of consumer products, and then resumed the growth starting in 2012.



The following graph shows the growing trend in the consumption of fertilizers allowed only in organic farming and the one in reduction of fertilizers allowed only in conventional agriculture.



Question by Turkey at Thursday, 11 April 2019

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 12 April

Title: Compilation and preparation of the national GHG inventory

Are there any challenges in the compilation & preparation of the national GHG inventory faced by Italy? If yes, could Italy provide more information on them and how she considers to address them in the short and/or long-term?

[Based on the information given in Paragraph 9 of the document FCCC/TRR.3/ITA]

Answer by Italy, Friday, 07 June 2019

ISPRA is responsible by law of the implementation of the National System both for the emission inventory and for projections. Since its institution the National System has guaranteed the timelines of the inventory and projection preparation and submissions. Main challenges is to continue and guarantee the necessary resources in terms of staff and knowledge sharing. The gradual introduction of new personnel and the adequate training should allow to properly address the issue in the medium and long term.

Question by China at Wednesday, 10 April 2019

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 12 April

Title: conditional target

As a member state of European Union whose conditional 2020 target is 30% emission reduction comparing with 1990 level, what is the plan to further strength your mitigation actions and to enhance its pre-2020 ambition?

Answer by Italy, Friday, 07 June 2019

In addition to its unilateral 20% reduction commitment, the EU made a conditional offer to move to a 30% reduction by 2020 compared to 1990 levels, as part of a global and comprehensive agreement for the period beyond 2012, provided that other developed countries commit themselves to comparable emission reductions and developing countries contribute adequately according to their responsibilities and respective capabilities.

While the conditions for the EU to move to a 30% reduction by 2020 compared to 1990 levels have not been met, the EU remains on track to reach its target of reducing GHG emissions by 20 % from 1990 levels by 2020 under the Convention (including aviation as covered by EU legislation, excluding LULUCF) as well as its commitment for the Kyoto Protocol second commitment period (average emissions between 2013-2020 below 80% of base year emissions, jointly with Iceland).

In 2017, EU GHG emissions were down by 21,9 % from 1990 levels, according to preliminary data (covering emissions from international aviation, but not emissions and removals from land use, landuse change and forestry (LULUCF)). According to projections from 2017/2018, the domestic greenhouse gas reductions in 2020 compared to 1990 would be around 26% with existing measures and without the use of international credits (JI and CDM).

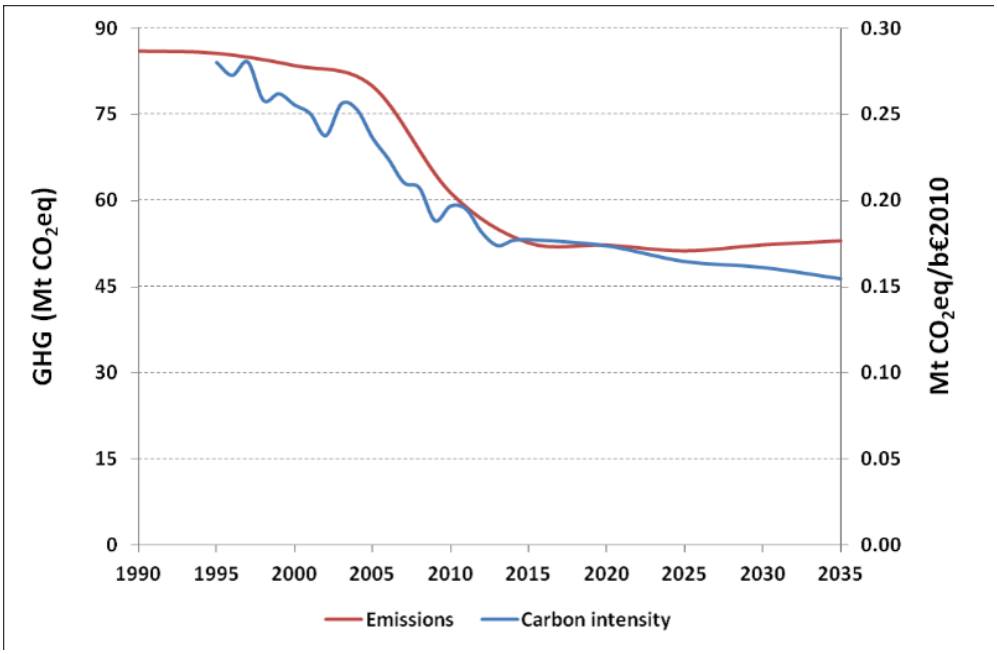
The European Commission and Member States are in continuous process of climate policy review and design, further strengthened by the development of integrated national climate and energy plans (NECPs) under the recently adopted Governance Regulation. Progress towards targets is monitored annually on the basis of greenhouse gas inventory information and projections (updated at least biennially) to inform policy development (more information

at: https://ec.europa.eu/clima/policies/strategies/progress_en).

In Italy, total greenhouse gas emissions, in CO_2 equivalent, excluding emissions and removals from LULUCF, have decreased by 17.4% between 1990 and 2017, varying from 518 to 428 $MtCO_2eq$.

The main driver for the reduction of CO_2 emissions is the reduction in emissions observed in energy industries and manufacturing industries and construction; in the period 1990-2017, emissions from energy industries decreased by 23.6% while those from manufacturing industries and construction show a decrease of 45.4%.

The industrial sector has gone through a period of reduction of energy consumption, driven by the economic crisis but also by improvements of efficiency of industrial activities, which has led to a reduction of emissions as well. Indeed, as shown in the figure below, it is essential to remark that the carbon intensity of energy uses of industry has decreased steeply since 1995.



This shows that the observed reduction of emissions is not only due to lower consumption but also to structural changes in the sector (less energy intensive activities as mechanical industry, food manufacture, specialized chemicals manufacture and other light industries are playing a major role) and to the increase in efficiency.

In the framework of the share of the commitment between European Member States (Effort sharing decision), Italy is well on track to fulfill its obligations related to GHG emissions for 2020 and it is projected to overachieve the assigned amount of reductions.

In the, so-called, non-ETS sectors (meaning transport, buildings, agriculture, non CO2 industrial emissions and industrial combustion plants below 20MW), Italy is projected to overachieve the target for around 174$MtCO_2eq$ cumulatively in the period 2013-2020. If compared to 2005 levels, reductions projected in 2020 in these sectors account for -19%.

It has to be noted that this amount cannot be used in any way for compliance in the forthcoming 2021-2030 period.

In ETS sectors important reductions are also projected to be achieved, accounting for -40% in 2020 compared to 2005 levels.

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Session closes at 08-06-2019

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