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Sustainable Civil Society Dialogue For Sustainable Development Project Monitoring Report

Part 1: EU environmental legislation and achievements¹

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1. AIR Legislation

A) *Clean Air* - Last update: 12/02/2019

Clean air is essential to our health and to the environment. But since the industrial revolution, the quality of the air we breathe has deteriorated considerably - mainly as a result of human activities. Rising industrial and energy production, the burning of fossil fuels and biomass, as well as the dramatic rise in traffic on our roads all contribute to air pollution in our towns and cities which, in turn, can lead to serious problems for both health and the environment.



The human toll for poor air quality is worse than for road traffic accidents, making it the number one environmental cause of premature death in Europe, with over 390.000 premature deaths every year. It also impacts on quality of life by causing or exacerbating asthma and respiratory problems. Air pollution causes lost working days, and high healthcare costs, with vulnerable groups such as children, asthmatics and the elderly the worst affected. It damages ecosystems through excess nitrogen pollution (eutrophication) and acid rain.

To counter this, the European Union has set itself the goal to achieve levels of air quality that do not give rise to significant negative impacts on, and risks to, human health and the environment. Since the early 1970s, the EU has been working to improve air quality by controlling emissions of harmful substances into the atmosphere, improving fuel quality, and by integrating environmental protection requirements into the transport and energy sectors.

As a result, much progress has been made in tackling air pollutants such as sulphur dioxide, lead, nitrogen oxides, carbon monoxide and benzene. Yet, and despite the progress made to date, poor air quality continues to cause serious and avoidable problems. As a next step towards improving air quality, the European Commission adopted in 2013 a Clean Air Policy Package, including a Clean Air Programme for Europe setting objectives for 2020 and 2030, and accompanying legislative measures.





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In 2018, The Commission adopted a *Communication "A Europe that protects: Clean air for all"* that provides national, regional and local actors practical help to improve air quality in Europe

Via this website, you can find more information on what the European Union is doing to reduce national air pollution emissions as well as air pollution from the main sources, and thus improve air quality.

Highlights 2019

- **"EU Clean Air Forum"**

The Clean Air Forum 2019 takes place 28-29 November in Bratislava. The main themes for the event are air quality and energy; air quality and agriculture; and clean air funding mechanisms.

- **Fitness check of the EU Ambient Air Quality Directives (Report)**

The results of the on-going fitness check are expected to be published by the end of 2019.

- **First National Air Pollution Control Programmes**

To be submitted by Member States by 1 April 2019, in line with Directive 2016/2284 (National Emission Ceilings).

- **First data on air pollution impacts on ecosystems**

To be submitted by Member States by 1 July 2019, in line with Directive 2016/2284 (National Emission Ceilings).

Highlights 2018

- **Communication "A Europe that protects: Clean air for all"**

On 17 May, the Commission published a *Communication 'A Europe that protects: Clean air for all'* outlining measures available to help EU Member States to fight air pollution. *Press release - Infographic: Clean air for all.*

- Adoption of the *Report* on the implementation and compliance with the sulphur standards for marine fuels set out by Directive (EU) 2016/802





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Highlights 2017

- **Fitness check of the EU Ambient Air Quality Directives (Roadmap)**

This fitness check will look at the performance of the two complementary EU Ambient Air Quality (AAQ) Directives (Directives 2008/50/EC and 2004/107/EC). The findings of the fitness check will be used to inform further reflections on whether the AAQ Directives are fit for purpose and continue to provide the appropriate legislative framework to ensure protection from adverse impacts on, and risks to, human health and the environment.

- **EU Clean Air Outlook**

This report provides an update of the impact assessment analysis to track progress towards the objectives of the National Emission Ceilings Directive.

- **EU Clean Air Forum**

The inaugural Clean Air Forum on 16 and 17 November 2017 in Paris provided an occasion for decision makers and stakeholders to share knowledge and assist in the implementation of European, national and local air policies. The Forum focused on three areas: air quality in cities; agriculture and air quality; and clean air business opportunities.

- **European Air Quality Index**

The European Environment Agency now offers an Air Quality Index that allows citizens to monitor air quality in real time.

- **Brochure on lower-cost sensors for measuring air quality**

The Joint Research Centre published a brochure that summarizes which types of sensors are currently available and gives an overview of their advantages and disadvantages.

B) Air Quality - Existing Legislation - Last updated: 06/09/2018

- **Directive 2008/50/EC** on ambient air quality and cleaner air for Europe including the following elements:
 - The merging of most of existing legislation into a single directive (except for the Fourth Daughter Directive) with no change to existing air quality objectives.





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- New air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives.
 - The possibility to discount natural sources of pollution when assessing compliance against limit values.
 - The possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values.
- Directive 2004/107/EC of the European Parliament and of the Council relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (*Fourth Daughter Directive*).
 - Directive 2015/1480/EC of 28 August 2015 amending several annexes to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council laying down the rules concerning reference methods, data validation and location of sampling points for the assessment of ambient air quality
 - Commission Implementing Decision 2011/850/EU: Commission Implementing Decision of 12 December 2011 laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality (notified under document C(2011) 9068).



A Civil Society example: the Kyoto Club Mobilitaria Report

The Kyoto Club *Sustainable Mobility Working Group*, together with the experts of CNR-IIA – National Research Council, Institute on Atmospheric Pollution - has published the MobilitAria Report. The document gives a comprehensive picture of the air quality trend in the 14 main Italian urban areas, linking it with the urban mobility policies. In the 2019 Edition, MobilitAria takes advantage of the contribution from OPMUS – the Observatory on Sustainable Urban Mobility Policies of ISFORT – Superior Institute of Training and Research on Transportation.

The 2019 Report is now available also in English: <https://www.kyotoclub.org/news-in-english/2019-ott-07/urban-mobility-and-air-quality-in-14-cities-and-metropolitan-areas-2017-2018/docId=9293>





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2. WATER Legislation

A) *Drinking water Directive - overview - Last updated: 31/01/2018*

The Drinking Water Directive (*Council Directive 98/83/EC* of 3 November 1998 on the quality of water intended for human consumption) concerns the quality of water intended for human consumption. Its objective is to protect human health from adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

The consolidated text of the Directive with its latest amendments including *Commission Directive (EU) 2015/1787* of 6 October 2015 can be found in the Directory of European Union consolidated legislation.



The Drinking Water Directive applies to:

- all distribution systems serving more than 50 people or supplying more than 10 cubic meter per day, but also distribution systems serving less than 50 people/supplying less than 10 cubic meter per day if the water is supplied as part of an economic activity;
- drinking water from tankers;
- drinking water in bottles or containers;
- water used in the food-processing industry, unless the competent national authorities are satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.

The Drinking Water Directive *doesn't* apply to:

- natural mineral waters recognised as such by the competent national authorities, in accordance with Council Directive 80/777/EEC of 15 July 1980 on the approximation of the laws of the Member States relating to the exploitation and marketing of natural mineral





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waters and repealed by Directive 2009/54/EC of 18 June 2009 on the exploitation and marketing of natural mineral waters; and

- waters which are medicinal products within the meaning of Council Directive 65/65/EEC of 26 January 1965 on the approximation of provisions laid down by law, regulation or administrative action relating to medicinal products and repealed by Directive 2001/83/EC of 6 November 2001 on the Community code relating to medicinal products for human use.

The Directive laid down the essential quality standards at EU level. A total of 48 microbiological, chemical and indicator parameters must be monitored and tested regularly. In general, World Health Organization's guidelines for drinking water and the opinion of the Commission's Scientific Advisory Committee are used as the scientific basis for the quality standards in the drinking water.

When translating the Drinking Water Directive into their own national legislation, Member States of the European Union can include additional requirements e.g. regulate additional substances that are relevant within their territory or set higher standards. Member States are not allowed, nevertheless, to set lower standards as the level of protection of human health should be the same within the whole European Union.

Member States may, for a limited time, depart from chemical quality standards specified in the Directive (Annex I). This process is called "derogation". Derogations can be granted, provided it does not constitute a potential danger to human health and provided that the supply of water intended for human consumption in the area concerned cannot be maintained by any other reasonable means.

The Directive also requires providing regular information to consumers. In addition, drinking water quality has to be reported to the European Commission every three years. The scope of reporting is set out in the Directive. The Commission assesses the results of water quality monitoring against the standards in the Drinking Water Directive and after each reporting cycle produces a synthesis report, which summarizes the quality of drinking water and its improvement at a European level.

Further principles laid in the Directive are:

- **Planning**
- **Regulation** (obligations of the Member States and the Commission)
- **Monitoring**
- **Information and Reporting**





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In accordance with the provisions of Article 14 of the Directive, the deadline was November 2003 for the 15 Member States which were part of the EU before 2004 (EU-15) to have taken the measures necessary to ensure that the quality of water intended for human consumption complies with the Directive. New Member States had to comply with the Directive by the day of accession unless specific implementation deadlines were laid down in the Accession Treaties.

B) The EU Water Framework Directive

On 23 October 2000, the *Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy* or, in short, the EU Water Framework Directive (or even shorter the WFD) was finally adopted.

The Directive was published in the Official Journal (OJ L 327) on 22 December 2000 and entered into force the same day.

Getting Europe's waters cleaner by managing water on a river basin scale: the new European water policy

Pressure for a fundamental rethink of Community water policy came to a head in mid-1995: The Commission, which had already been considering the need for a more global approach to water policy, accepted requests from the European Parliament's Environment Committee and from the Council of Environment Ministers and the outcome of a broad process of consultation. Concretely, the Commission concluded that, while considerable progress had been made in tackling individual issues, the water policy was fragmented, in terms both of objectives and of means. All parties agreed on the need for a single piece of framework legislation to resolve these problems. In response to this, the Commission presented a Proposal for a Water Framework Directive with the following key aims:

- expanding the scope of water protection to all waters, surface waters and groundwater
- achieving "good status" for all waters by a set deadline
- water management based on river basins
- "combined approach" of emission limit values and quality standards
- getting the prices right
- getting the citizen involved more closely
- streamlining legislation





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The outline below shows how these elements are made operational within the Directive.

Citizens' involvement - WFD CIRCABC - the Information Exchange Platform

One of the key activities under the joint implementation of the Water Framework Directive (WFD) is the improvement of the information exchange between Countries, European institutions, the various stakeholders and the interested public. In order to promote greater information exchange and to facilitate the work in the numerous expert groups, the Commission set up an internet-based platform called "CIRCA" which has recently migrated to a new platform called "CIRCABC".

CIRCABC stands for "Communication and Information Resource Centre for Administrations, Businesses and Citizens" and it is a web-based service provided by the European Commission. It is used to create collaborative workspaces where communities of users can work together and share information and resources. CIRCABC is financed by the ISA. The Directorate General for Informatics at the European Commission (DG DIGIT) is responsible for coordinating the development and the user community. It hosts the application and provides helpdesk and support.



A Civil Society example: The #ProtectWater Campaign

#ProtectWater is an NGO-led campaign calling citizens across Europe to take a stand for Europe's rivers, lakes and wetlands, and the strong law which protects them, the *EU Water Framework Directive*, during the European Commission's ongoing fitness check. The public consultation is now closed, and the campaign has been a success, since the EU Commission at the moment has decided to *not modify* the Water Framework Directive.

In Italy, Kyoto Club is member of the Coalition Living Rivers – composed by 23 organizations - promoting the #ProtectWater campaign.





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C) Urban Waste-Water Directive and its requirements - Last updated: 12/02/2019

In this section of the website you can find:

- [The texts of the Directive, its amendment and associated Commission decision](#)
- [Information on the deadlines imposed by the Directive](#)

Evaluation of the Urban Waste-Water Treatment Directive

A [REFIT Evaluation](#) process for the Urban Waste Water Treatment Directive (UWWTD) was started in October 2017. The Evaluation will follow the principles of the [Better Regulation Guidelines](#) for Fitness Checks and Evaluations, and the findings will feed into the Commission's reflection on possible further action. The Evaluation will assess five criteria: effectiveness, coherence, efficiency, relevance, and EU-added value by analysing the Directive's objectives, requirements and implementation in the last 25 years in the entire EU.

The Urban Waste Water Treatment Directive is closely linked to the [Water Framework Directive](#) (WFD), as it is a basic measure under this Directive and therefore essential for the achievement of the objectives of the WFD. The evaluation of the UWWTD will run a little ahead of the Fitness Check for the WFD, its daughter directives and the Floods Directive. The results of the evaluations are therefore expected to provide useful input to the Fitness Check.

More information on the Evaluation process:

- 12/10-9/11/2017: A [Roadmap](#) for the evaluation was published in October 2017, which informs citizens and stakeholders about the Commission's Evaluation work. Feedback received on the Roadmap can be found on the link above.
- 22/05/2018: [Publication of the consultation strategy](#). The strategy lays out the joint approach with the Fitness Check on the WFD, its daughters and the Floods Directive to ensure comprehensive and efficient stakeholder interaction.

Consultation activities as part of the Evaluation:

- An online public consultation in all EU official languages was open from 13 July until 19 October 2018. Results will be published when available.
- A stakeholder conference took place on 16th November 2018. Stakeholders discussed and validated the preliminary findings of the Evaluative Study. Available information from the conference can be found [here](#).





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- Three technical workshops on key issues took place: 1) Emerging Pollutants on 24th October 2018 (jointly with the WFD Fitness Check); 2) Storm water overflows and Individual appropriate system on 25th October 2018; and 3) Cost and benefits of the directive on 8th November 2018. Information can be found here.

Documents/studies relevant for the Evaluation:

- The BLUE2 study - the European Commission is conducting a study on the socio-economic assessment of policies aiming to improve the quality of freshwater and the marine environment. The study has two parts. The purpose of Part A is to identify the economic benefits of the EU water policy and the cost of its non-implementation. Part B is supporting a wider effort to build up a Europe-wide capacity for the integrated assessment modelling of policies that affect the quality of the freshwater and marine environment.
- The OECD, together with the European Commission, is carrying out a study to support strategic thinking at EU and Member State level about the financing of the water sector in the years to come. The study is conducted under the umbrella of the Roundtable on financing water.
- Fitness Check of EU Water Policy (Blueprint 2012). The results of the 2012 Fitness Check of EU Water policy will be an important contribution for this Fitness Check.
- Relevant LIFE projects, which can be identified via the database of LIFE projects.
- The recent Commission's study on environmental integration in cohesion policy, which contains an analysis of funding for water during the three most recent funding periods.
- The ex-post Evaluation of 2007-2013 cohesion policy.
- Analysis of relevant EU research projects to be completed by the Directorate-General for Research and Innovation (RTD) mid-2018.
- Mapping microplastics in sludge – a study from 2017 by the Norwegian Institute for Water Research, on behalf of the Norwegian Environment Agency.
- Study on storm water overflows - Assessment of impact of storm water overflows from combined waste-water collecting systems on water bodies (including the marine environment) in the 28 EU Member States from 2016.
- Study on potential replacement of the COD parameter in the UWWTD.
- The European Court of Auditors special reports:





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- Special report No 2/2015: EU-funding of Urban Waste-Water Treatment plants in the Danube river basin
- Special report No 03/2016: Combating eutrophication in the Baltic Sea: further and more effective action needed.

Feedback

If you have any questions about the Evaluation of the Urban Waste Water Treatment Directive or any suggestions that could help us, in general, to improve this site, please send an email to the functional Urban Waste Water mailbox of DG Environment: ENV-URBAN-WASTE-WATER@ec.europa.eu.

A Civil Society example: *#salvalacqua* Campaign



Water Pact: a document of principles and proposals aimed at saving water, recovering and reusing water, promoted by the FAI - *Fondo Ambiente Italiano* (Italian Environmental Fund), as part of its *#salvalacqua* awareness campaign, and signed by the main players in the water Italian system: from the research institutions to managers network, from the reclamation consortia to farmers, from technical expert and planners to local authorities.

Kyoto Club is a member of the campaign.





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What's new?

- The **EU Water Innovation Conference 2019** will take place on **12 December 2019 in Zaragoza, Spain**. Click [here](#) for more information, for-free registration and if you wish to organise a side-meeting back to back to the conference.
- On 11 March 2019, the Commission adopted a **strategic approach to pharmaceuticals in the environment**, as required by Article 8c of Directive 2008/105/EC as amended by Directive 2013/39/EU. Read more [here](#).
- The Commission has published its **fifth Implementation Report** assessing the progress on the implementation of the Water Framework Directive and the Floods Directive.
- The **5th European Water Conference took place in Vienna on 20-21 September 2018**. The Conference was organised by the Commission and the Austrian EU Presidency with the aim to present and discuss progress on the implementation of EU water legislation. More information: [Conference Website](#).
- An **online public consultation** was launched on 17 September 2018, covering both the Water Framework Directive and the Floods Directive. This consultation is available in all EU official languages
- **EIP Water: Call for hosting the fifth European Innovation Partnership (EIP) on Water Conference in 2019**. Deadline for applications: 14 September 2018. More information on [EIP Water website](#).
- The Commission has launched the **Fitness Check** covering a large part of the **EU Water Legislation**. The aim is to assess whether the current regulatory framework for a policy sector is “fit for purpose” as per the [Better Regulation Guidelines](#). The goal is to assess the effectiveness, efficiency, coherence, relevance and EU added value of EU Water Legislation, thus promoting better/smarter legislation, making it more responsive to current and future challenges as well as helping improve implementation. More information [here](#).
- The Commission has launched the updated “**peer-to-peer process support for the improvement of Water Framework Directive (WFD) and Floods Directive (FD) implementation**”, which will run for two years. The aim of this initiative is to support a direct exchange between experts and Competent Authorities in charge of River Basin Management Plans and Flood Risk Management Plans. All material related to the project can be found on the website: www.aquacoope.org/peertopeer. Further follow-up already mentioned





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3. Waste

In Europe, we currently use 16 tonnes of material per person per year, of which 6 tonnes become waste. Although the management of that waste continues to improve in the EU, the European economy currently still loses a significant amount of potential 'secondary raw materials' such as metals, wood, glass, paper, plastics present waste streams. In 2010, total waste production in the EU amounted to 2,5 billion tons. From this total only a limited (albeit increasing) share (36%) was recycled, with the rest was landfilled or burned, of which some 600 million tons could be recycled or reused.

Just in terms of household waste alone, each person in Europe is currently producing, on average, half of tonne of such waste. Only 40 % of it is reused or recycled and in some countries more than 80% still goes to landfill (source: [Environmental Data Centre on Waste](#), Eurostat).

Turning waste into a resource is one key to a circular economy. The objectives and targets set in European legislation have been key drivers to improve waste management, stimulate innovation in recycling, limit the use of landfilling, and create incentives to change consumer behaviour. If we re-manufacture, reuse and recycle, and if one industry's waste becomes another's raw material, we can move to a more circular economy where waste is eliminated, and resources are used in an efficient and sustainable way.

Improved waste management also helps to reduce health and environmental problems, reduce greenhouse gas emissions (directly by cutting emissions from landfills and indirectly by recycling materials which would otherwise be extracted and processed), and avoid negative impacts at local level such as landscape deterioration due to landfilling, local water and air pollution, as well as littering.

The European Union's approach to waste management is based on the "waste hierarchy" which sets the following priority order when shaping waste policy and managing waste at the operational level: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery).

In line with this the 7th Environment Action Programme sets the following priority objectives for waste policy in the EU:

- To reduce the amount of waste generated;
- To maximise recycling and re-use;





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- To limit incineration to non-recyclable materials;
- To phase out landfilling to non-recyclable and non-recoverable waste;
- To ensure full implementation of the waste policy targets in all Member States.

The following webpages describe the main elements of EU waste legislation in more detail:

- Waste framework legislation
- Waste stream legislation
- Landfilling and incineration
- Shipment of waste
- Implementation and reporting
- Review of EU waste policy
- Studies/publications/links

The development and implementation of EU waste policy and legislation takes place within the context of a number of wider EU policies and programmes including 7th Environment Action Programme, the Resource Efficiency Roadmap and the Raw Materials Initiative.

Brochure: The EU's approach to waste management





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A) EU Waste Legislation Overview

Several pieces of consolidated EU waste legislation can be downloaded from the European Union [CELEX](#) site, but please note that this is not complete.

Specific links to individual pieces of EU waste management legislation are provided below, divided into five main sub-categories:

- A. [Framework European Union legislation on waste](#)
- B. [European Union legislation on waste management operations](#)
- C. [European Union legislation on specific waste streams](#)
- D. [Reporting and questionnaire legislation](#)
- E. [Useful links to other in/directly related legislation](#)

Within each sub-category, the individual legislative instruments are listed in chronological order of adoption of the main pieces of legislation. Where ancillary legislation is in existence, this is listed in chronological order below the parent legislative instrument.

Various instruments have not yet been made available on CELEX in full electronically, so that annexes, diagrams and tables are unable to be downloaded. In respect of some of these, there is though a facility via CELEX called 'TIF' which is able to deliver a full version - for this the user must click on the pale blue icon marked 'TIF' under the CELEX title of the instrument to order a copy by email.

- [Summary of EU Waste Legislation](#)

Directive (EU) 2018/851

Directive (EU) 2018/851 makes amendments to Directive 2008/98/EC on waste (The Waste Framework Directive) which provides the legislative framework for the collection, transport, recovery and disposal of waste.

This Directive makes amendments in order to, among other things:

- increase targets for preparing for re-use and recycling of waste;
- remove substances intended for animal feed from the scope of Directive 2008/98/EC;
- add a number of new definitions;
- change cease to be waste conditions and requirements;
- set out exemptions for separation of waste collection;
- establish bio-waste separation;
- establish household hazardous waste collection; and
- update record keeping requirements.





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Targets

This Directive adds the following three new targets:

- By 2025, the preparing for re-use and the recycling of municipal waste shall be increase to a minimum of 55% by weight;
- By 2030, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 60% by weight; and
- By 2035, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 65% by weight.

(Preparing refers to sorting, checking, cleaning or repairing recovery operations, by which products or their components that would have become waste are prepared in a way so that they will be recycled or reused without any other pre-processing).

B) European strategy for plastics



Plastics are an important material in our economy, and modern daily life is unthinkable without them. At the same time however, they can have serious downsides on the environment and health. Action on plastics was identified as a priority in the Circular Economy Action Plan, to help European businesses and consumers to use resources in a more sustainable way.

The first-ever European Strategy for Plastics in a Circular Economy adopted on January 2018 will transform the way plastic products are designed, used, produced and recycled in the EU. Better design of plastic products, higher plastic waste recycling rates, more and better quality recyclates will help boosting the market for recycled plastics. It will deliver greater added value for a more competitive, resilient plastics industry.

The strategy is part of Europe's transition towards a circular economy, and will also contribute to reaching the Sustainable Development Goals, the global climate commitments and the EU's industrial policy objectives. This strategy will help protect our environment, reduce marine litter, greenhouse gas emissions and our dependence on imported fossil fuels. It will support more sustainable and safer consumption and production patterns for plastics.





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EU plastics strategy key documents:

- EU Strategy for Plastics in the Circular Economy - staff working document - brochure
- Strategy for plastics press release and questions and answers
- Factsheets on the strategy for plastics in a circular economy
- Factsheet - changing the way we use plastics (EU wide)
- Factsheet - changing the way we use plastics -EU countries (in all EU languages)
- Other 2018 Circular Economy Action Plan initiatives

On June 5, 2019, **Directive 2019/904** (published in the Official Journal of the European Union L 155/1) was formally adopted by the European Parliament and by the Council of the European Union, aimed at **reducing the incidence of products disposable plastic products on the environment**, in particular on the aquatic environment, and on human health, as well as promoting the transition to a circular economy with innovative business models, products and materials. The Directive (which came into force on 2 July 2019) specifically concerns disposable plastic products that most pollute the beaches and seas of Europe and fishing gear containing plastic. Together, these products involved about 77% of marine litter.

These are the main measures established: Measures to reduce the consumption of food containers and beverage cups. Restrictions on the marketing of disposable plastic with readily available alternatives expanded, expanded polystyrene beverage cups); Awareness raising measures and extended producer responsibility regimes for all items that do not fall within the market restriction measure, at the end of the prevention costs, of waste management, including treatment costs. Labeling obligations to inform consumers about proper waste disposal, plastic content and environmental impact. Measures related to product design (for example relating to beverage bottles with a cap attached). Each member state must be regulated according to 3 July 2021 to comply with the new rules by 3 July 2021. According to data released by the European Commission, thanks to the new directive, so quantifiable environmental and economic benefits will be gained: the emission of 3.4 million CO₂ equivalent components will be avoided; environmental damage will be reduced for an equivalent cost of € 22 billion by 2030; savings of around € 6.5 billion will be generated for consumers.





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A Civil Society Example: Economia circolare in Italia



Economia circolare in Italia (Circular economy in Italy) is a study promoted by Kyoto Club's **Recycling and Recovery Group** and commissioned by *CONAI's* packaging recycling sector, *CIAL*, *COMIECO*, *COREPLA*, *RICREA* and the water sector illustrated by the *CAP Group*.

This is a first real balance sheet on the circular economy in Italy that shows how the Italian economy is today in Europe the most performing in terms of material circularity, productivity of resources, recycling capacity.

What's new?

- The Commission has adopted the report on the implementation and on the impact on the environment and the functioning of the internal market of the Batteries Directive (2006/66/EC) on the 9 of April 2019. The Commission has also published the report on the evaluation of the Batteries Directive.
- The final report of the Study on POPs Waste is available. An advanced copy can be downloaded (pdf, ~9,96 MB)
- The final report of the Study in support of the evaluation of the Directive 2006/66/EC on Batteries is available. An advanced copy of the report and other documents prepared for the evaluation are now available.
- Commission reviews implementation of EU waste rules, proposes actions to help 14 Member States meet recycling targets.
- Proposal for a single-use plastics directive: The Commission is proposing new EU-wide rules to target the 10 single-use plastic products most often found on Europe's beaches and seas, as well as lost and abandoned fishing gear.





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- EU Member States approved a set of ambitious measures to make EU waste legislation fit for the future as part of the EU's wider circular economy policy (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:150:TOC>). New EU waste package video
- Circular Economy: the Commission delivers technical guidance on classification of waste as announced in the Communication on the implementation of the circular economy package: options to address the interface between chemical, product and waste legislation.
- Representatives of Member States and of Stakeholders will participate in a meeting of the Expert Group on Waste (Batteries), scheduled for the next 14 of March, where the initial findings of the Study in Support of the Evaluation of the Batteries Directive will be presented
- Notice to stakeholders withdrawal of the United Kingdom an EU waste law
- Notice to stakeholders - Withdrawal of the United Kingdom and EU rules in the field of industrial products
- Conference: "Municipal waste management and waste prevention"
- Circular Economy: Commission delivers on its promises, offers guidance on recovery of energy from waste. The package also contains a proposal to update legislation to restrict the use of certain hazardous substances in electrical and electronic equipment

(RoHS Directive). [Press release](#) [News archive](#)





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4. Protection of nature and biodiversity

A) *Protecting Europe's biodiversity (Natura 2000) - last update 21.02.2017*

SUMMARY OF:

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

WHAT IS THE AIM OF THE DIRECTIVE?

- It seeks to contribute to ensuring biodiversity in the European Union by the conservation of:
 - natural habitats, and
 - wild fauna and flora species.
- It sets up the 'Natura 2000' network, the largest ecological network in the world. Natura 2000 comprises **special areas of conservation** designated by EU countries under this directive. Natura 2000 also includes the **special protection areas** classified under the Birds Directive (Directive 2009/147/EC).

KEY POINTS

Protection of sites (Natura 2000 network)



- The directive's Annexes I and II list the **types of habitats and species of special areas of conservation** whose conservation requires the **designation of special areas of conservation***. Some of these are defined as '**priority**' habitats or species in danger of disappearing and for which there are specific rules.
 - Annex III lists the **criteria** for selecting sites eligible for identification as sites of Community importance and for designation as **special areas of conservation**.
- The **designation process** is in 3 stages:





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1. Using the criteria in the annexes, each EU country draws up a **list** of sites hosting natural habitats and wild fauna and flora.
2. On the basis of the national lists and in agreement with the EU countries, the European Commission then adopts a **list of sites of Community importance** for each of the EU's **9 biogeographical regions**:
 - the Alpine region;
 - the Atlantic region;
 - the Black Sea region;
 - the Boreal region;
 - the Continental region;
 - the Macaronesian region;
 - the Mediterranean region;
 - the Pannonian region;
 - the Steppic region.
3. Within 6 years of the selection of a site of Community importance, the EU country concerned must designate it as a **special area of conservation**.

Consultation procedure

- Where the Commission considers that a site which hosts a priority natural habitat type or species has been **omitted** from a national list, a **consultation procedure** may take place between itself and the country in question. If the result is unsatisfactory, the Commission may forward a proposal to the Council on the selection of the site as one of Community importance.

Conservation objectives and measures

- Once special areas for conservation are designated, EU countries must introduce appropriate conservation objectives and measures. They must do everything possible to:
 - guarantee the conservation of habitats in these areas;
 - avoid their deterioration and any significant disturbance to species.
- EU countries must also:
 - encourage the proper management of **landscape features** essential for the migration, dispersal and genetic exchange of wild species;
 - undertake **surveillance** of both habitats and species.





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Assessment of plans/projects

- Any plan or project that is likely to have a significant impact on a Natura 2000 site should be a subject of **appropriate assessment**. EU countries must agree on a plan or project only after having ascertained that it will not have a significant impact on the integrity of protected sites.
- In the absence of other alternatives, some projects that will cause significant negative impact may still be permitted for imperative reasons of **overriding public interest** (i.e. social or economic reasons). Where this arises, EU countries must introduce **compensatory measures** to ensure the overall coherence of the Natura 2000 network.

Protection of species

EU countries must:

- establish **systems of strict protection** for animal and plant species which are particularly threatened (Annex IV), prohibiting
 - all forms of deliberate capture or killing of specimens of these species in the wild;
 - deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;
 - deliberate destruction or taking of eggs from the wild;
 - deterioration or destruction of breeding sites or resting places;
- **prohibit the use of non-selective methods** of taking, capturing or killing certain animal and plant species (Annex V);
- set up a system to monitor the **incidental capture and killing** of the animal species listed in Annex IV(a);
- **report the measures** they have taken to the Commission every 6 years. The Commission then issues a composite report covering the entire EU.

FROM WHEN DOES THE DIRECTIVE APPLY?

It has applied since 10 June 1992. EU countries had to incorporate it into national law by 10 June 1994.





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BACKGROUND

The Natura 2000 network represents almost one fifth of the EU's land area and more than 250 000 km² of marine area.

See also:

- [‘The Habitats Directive’](#) on the European Commission's website.
- [‘The Birds Directive’](#) on the European Commission's website.
- [‘Natura 2000’](#) on the European Commission's website.
- [‘European Topic Centre on Biological Diversity’](#) on the Eionet's website.

* KEY TERMS

Special area of conservation: a site of Community (i.e. EU) importance designated by EU countries where the required conservation measures are taken to ensure that the favourable conservation status of the natural habitats and/or the populations of the species for which the site is designated is maintained or restored.

MAIN DOCUMENT

Council Directive [92/43/EEC](#) of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, pp. 7-50)

Successive amendments to Directive 92/43/EEC have been incorporated in the original text. This [consolidated version](#) is of documentary value only.

RELATED DOCUMENTS

Directive [2009/147/EC](#) of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, pp. 7-25)

See [consolidated version](#).

Report from the Commission to the Council and the European Parliament — The state of nature in the European Union — Report on the status of and trends for habitat types and species covered by the Birds and Habitats Directives for the 2007-2012 period as required under Article 17 of the Habitats Directive and Article 12 of the Birds Directive ([COM\(2015\) 219 final](#), 20.5.2015)





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Legal sources

- Birds Directive: Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version of Directive 79/409/EEC as amended)
- Habitats Directive: Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Also available the consolidated version of 1 January 2007 with the latest updates of the annexes)
- Regulation on Invasive Alien Species: Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species
- Zoos Directive: Council Directive 1999/22/EC of 29 March 1999 on the keeping of wild animals in zoos.
- Leghold Traps Regulation: Council Regulation (EEC) No 3254/91 of 4 November 1991 prohibiting the use of leghold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leghold traps or trapping methods which do not meet international humane trapping standards
- Trade in Seal Products: Regulation (EC) No 1007/2009 of the European Parliament and of the Council of 16 September 2009 on trade in seal products (Text with EEA relevance)
- Seal Pups Directive: Council Directive 83/129/EEC of 28 March 1983 concerning the importation into Member States of skins of certain seal pups and products derived therefrom
- Case law





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5. EU climate action

Policy



Flash

The Paris Agreement: the world unites to fight climate change

EU financing climate action

Causes and Consequences of Climate Change

EU Climate Action

EU adaptation to climate change

EU funding climate action

The EU's 2030 goals for climate and energy

The EU Emissions Trading System explained

Preventing dangerous climate change is a key priority for the European Union. Europe is working hard to cut its greenhouse gas emissions substantially while encouraging other nations and regions to do likewise.

Key EU targets for 2020

- 20% cut in **greenhouse gas emissions** compared with 1990
- 20% of total energy consumption from **renewable energy**
- 20% increase in **energy efficiency**





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Key EU targets for 2030

- At least 40% cut in **greenhouse gas emissions** compared with 1990
- At least 32% of total energy consumption from **renewable energy**
- At least 32.5% increase in **energy efficiency**

Long-term goal

By 2050, the EU aims to cut its emissions substantially – by 80-95% compared to 1990 levels as part of the efforts required by developed countries as a group.

Turning Europe into a highly energy efficient and low-carbon economy will also boost the economy, create jobs and strengthen Europe's competitiveness.

Action towards climate targets

The EU is pursuing its climate targets through a combination of financial support and regulation.

Financial support

- At least 20% of the EU's budget for 2014 to 2020 - as much as €180 billion - should be spent on protecting the climate. This is on top of funding from individual EU countries.
- The EU finances low-carbon energy demonstration projects from the sale of emission certificates. This includes technologies to trap carbon dioxide from power stations and other industrial installations and store it in the ground, so-called carbon capture and storage (CCS).

Regulation

- The EU's emissions trading system is the key tool for reducing greenhouse gas emissions from industry at the lowest cost.
- EU countries are required to support renewable energy sources such as wind, solar and biomass to reach the green energy targets.
- EU countries have to reduce the energy use of their buildings and industries are required to improve the energy efficiency of a wide array of equipment and household appliances.
- Car manufacturers have to reduce CO₂ emissions from new cars and vans.





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Adapting to climate change

The European Commission has adopted an EU Adaptation Strategy and wants all its Member States to adopt national plans to cope with the inevitable impacts of climate change by 2017. A number of Member States have already developed adaptation strategies.

For example, this includes measures such as:

- using less water
- adapting building regulations
- building flood defences
- developing crops that cope better in drought conditions

Keep global warming below 2°C

Global warming has to be **limited to below 2°C** compared to the average temperature in pre-industrial times to prevent the most severe impacts of climate change and possibly catastrophic changes in the global environment.

This was agreed by almost all countries worldwide in 1992 under the United Nations Framework Convention on Climate Change (UNFCCC).

To achieve this, the world must **stop the growth in greenhouse gas emissions by 2020** and reduce them by 60% by 2050 compared with 2010.

The latest scientific evidence suggests that, if little or no action is taken to reduce global emissions, by the end of this century global warming is likely to exceed the 2°C target and could be as much as 5°C.

International action

The EU is part of the new global climate agreement agreed in 2015 and due to be implemented from 2020.

The EU has committed to a second phase of the Kyoto Protocol running from 2013 to 2020.

As the world's leading donor of development aid, the EU also provides substantial funding to tackle climate change.





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6. EU Legislation on RES and EE

A) Renewable energy



Moving towards a low carbon economy

Renewable energy directive

The Renewable Energy Directive sets rules for the EU to achieve its 20% renewables target by 2020.

National renewable energy action plans 2020

EU countries' plans for meeting their 2020 renewable energy obligations.

Progress reports

EU countries publish progress reports every two years to show how they are moving towards the EU's 2020 renewables' goals.

Support schemes

Guidance for EU countries when designing and reforming support schemes for renewables.

Biomass

Using biomass as an energy source can lower the EU's external energy dependence and reduce greenhouse gas emissions.

Biofuels

The use of biofuels made from biomass provides a renewable alternative to fossil fuels in the EU's transport sector.





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Renewable energy can be produced from a wide variety of sources including wind, solar, hydro, tidal, geothermal, and biomass. By using more renewables to meet its energy needs, the EU lowers its dependence on imported fossil fuels and makes its energy production more sustainable. The renewable energy industry also drives technological innovation and employment across Europe.

2020 renewable energy targets

The EU's original Renewable energy directive (2009/28/EC) sets a binding target of 20% final energy consumption from renewable sources by 2020. To achieve this, EU countries have committed to reaching their own national renewables targets for 2020 ranging from 10% in Malta to 49% in Sweden. They are also each required to have at least 10% of their transport fuels come from renewable sources by 2020.

All EU countries have adopted national renewable energy action plans showing what actions are foreseen to meet their 2020 renewables targets. These plans include sectorial targets for electricity, heating and cooling, and transport; planned policy measures; the different mix of renewables technologies they expect to employ; and the planned use of cooperation mechanisms.

2030 renewable energy targets

In December 2018, the new revised Renewables energy directive (2018/2001) entered into force – establishing a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.

The new directive is part of the Clean energy for all Europeans package, aimed at establishing a new stable legislative framework which will facilitate the clean energy transition and help the EU to meet its Paris Agreement commitments on reducing greenhouse gas emissions.

Under the new Governance regulation, Member States were required to draft 10-year National Energy & Climate Plans (NECPs) by the end of 2019, outlining how they will meet the new 2030 targets for renewable energy and for energy efficiency. The Commission is currently analysing these drafts plans and is mandated to come forward with recommendations where necessary by the end of June 2019. And Member States must then finalise their plans by the end of 2019.

Support schemes for renewables

Public interventions such as support schemes remain necessary to make certain renewable energy technologies competitive. To avoid distorting energy prices and the market however, these schemes should be time-limited and carefully designed. The EU has issued guidance on support schemes to help governments when they design or revise support schemes.





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Progress reports towards the 2020 targets

Every two years, the EU publishes a renewable energy progress report.

The fourth State of the energy union report, published in April 2019, includes a renewable energy progress report (COM(2019) 225 final) which concludes that the EU is on track for reaching its target for 2020: in 2017, the share of renewable energy in the EU energy mix reached 17.52%.

Transparency Platform


Under the Directive 2009/28/EC, the European Commission must keep a 'transparency platform'. This allows public access to national and Commission documents relating to renewable energy.

Brexit




On 11 April 2019, the European Council (Article 50) decided, in agreement with the United Kingdom, to extend further the two-year period provided for by Article 50(3) of the Treaty on the European Union, until 31 October 2019. Following this decision, and until further notice, any reference in the documents published on this page to 30 March 2019 at 00.00 (CET) or 13 April 2019 at 00.00 (CET) as the withdrawal date of the United Kingdom from the European Union, must be read as referring to 1 November 2019 at 00.00 (CET). Please note that:

(i) in the event that the United Kingdom has not held elections to the European Parliament in accordance with applicable Union law and has not ratified the Withdrawal Agreement by 22 May 2019, the Decision referred to above shall cease to apply on 31 May 2019, and the withdrawal will therefore take place on 1 June 2019; and

(ii) should the United Kingdom ratify the Withdrawal Agreement at any stage before 31 October 2019, the withdrawal will take place on the first day of the month following the completion of the ratification procedures.

[Notice to stakeholders on the withdrawal of the United Kingdom and EU rules in the field of guarantees of origin of electricity from renewable energy sources](#) 

Related documents

- [Factsheet on the Revised Renewable Energy Directive \(2018/2001\)](#) 
- [Renewable energy progress report \(COM\(2019\) 225 final\)](#) [Search for available translations of the preceding link](#) ●●● 
- [Producing your own renewable electricity – best practices \(SWD\(2015\) 141 final\)](#) 
- [A policy framework for climate and energy in the period from 2020 to 2030 \(COM\(2014\) 15\)](#)





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- [Impact Assessment on energy and climate policy up to 2030 \(SWD\(2014\) 15\) | Executive Summary \(SWD\(2014\) 16\)](#)
- [Energy 2020: A strategy for competitive, secure, and sustainable energy \(COM\(2010\)639\)](#)

Related links

- Video: Clean energy for all Europeans – [renewable energy](#)
- [The EurObserver](#): monitors and analyses the development of renewable energy sectors in the EU
- [Clean energy for all Europeans package](#)
- [Governance rules](#)
- [National Energy & Climate Plans \(NECPs\)](#)

Related legislation

- [Renewable Energy Directive \(2018/2001\)](#)
- [Regulation on the Governance of the Energy Union and Climate Action \(\(EU\) 2018/1999\)](#)
- [Directive to reduce indirect land use change for biofuels and bioliquids \(\(EU\)2015/1513\)](#)
- [Renewable Energy Directive \(2009/28/EC\)](#)





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B) Energy Efficiency



Saving energy, saving money

Energy Efficiency Directive

The 2012 Directive, as amended in 2018, sets rules and obligations for the EU's 2020 and 2030 energy efficiency targets.

Energy performance of buildings

Making buildings more energy efficient is needed for the EU to achieve its energy and climate goals.

Cogeneration of heat and power

The EU promotes cogeneration in order to improve energy efficiency in Europe.

Energy label and ecodesign

EU energy efficiency measures for products will save money and energy

Financing energy efficiency

Mobilising private financing for energy efficiency investments.

Heating and cooling

The EU has launched a heating and cooling strategy as a first step in tackling the large amount of energy used by the sector.

By using energy more efficiently, Europeans can lower their energy bills, reduce their reliance on external suppliers of oil and gas, and help protect the environment.





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In order to achieve these benefits energy efficiency needs to be improved throughout the full energy chain, from production to final consumption. At the same time, the benefits of energy savings must outweigh the costs, for instance those that result from carrying out renovations. EU measures therefore focus on sectors where the potential for savings is greatest, such as buildings, or where coordinated approach is required.

Energy efficiency targets for 2020 and 2030

In 2012, under the Energy Efficiency Directive 2012/27/EU, the EU set a 20% energy savings target by 2020 (when compared to the projected use of energy in 2020) – this is roughly equivalent to turning off 400 power stations.

In December 2018, the revised Energy Efficiency Directive entered into force (amending Directive EU (2018/2002) updating some specific provisions and introducing some new elements. Above all, it establishes a **headline EU energy efficiency target for 2030 of at least 32.5%** (compared to PROMES 2008 projections) with a clause for a possible upwards revision by 2023.

Under the new Governance rules, Member States were required to draft by the end of 2018 their 10-year integrated National Energy & Climate Plans (NECPs) for 2021-2030, outlining how Member States will meet the 2030 targets for energy efficiency and for renewable energy. The Commission is currently assessing these draft plans and is mandated to come forward with recommendations (by the end of June 2019) if national contributions for energy efficiency are not sufficient to achieve the EU target for 2030. Member States must then finalise their NECPs by the end of 2019.

Policies to improve energy efficiency

The EU has adopted a number of measures to improve energy efficiency in Europe. They include:

- an annual reduction of 1.5% in national energy sales
- EU countries making energy efficient renovations to at least 3% of buildings owned and occupied by central governments per year
- mandatory energy efficiency certificates accompanying the sale and rental of buildings
- minimum energy efficiency standards and labelling for a variety of products such as boilers, household appliances, lighting and televisions (ecodesign)
- the preparation of National Energy Efficiency Action Plans every three years by EU countries





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- the planned rollout of close to 200 million smart meters for electricity and 45 million for gas by 2020
- large companies conducting energy audits at least every four years
- protecting the rights of consumers to receive easy and free access to data on real-time and historical energy consumption
- the Commission has published guidelines on good practice in energy efficiency.

Energy efficiency progress

Following a gradual decrease between 2007 and 2014, energy consumption increased between 2014 and 2017. This increase could partly be attributed to good economic performance since 2014, low-oil prices and colder winters. The primary energy consumption in 2017 was 5.3 % above the 2020 targets, whereas the final energy consumption was 3.3% above those targets. If energy consumption continues to increase in the coming years, the EU will not reach its 2020 target for both primary and final energy consumption. There is therefore a need to further intensify efforts to deliver energy savings in the short term.

- [2018 progress report](#) Search for available translations of the preceding link ●●●
- [2017 progress report](#)
- [2016 progress report](#)
- [2015 progress report](#)
- [Assessment by EU country on energy efficiency: part 1](#) | [part 2](#)

EU countries have implemented energy efficiency measures in all sectors, and these have contributed considerably to a decrease in EU energy consumption. The EU's drive towards a more energy efficient future has also produced substantial benefits for Europeans. For instance:

- New buildings consume half the energy they did in the 1980s
- Energy intensity in EU industry decreased by 16% between 2005 and 2014
- More efficient appliances are expected to save consumers €100 billion annually – about €465 per household – on their energy bills by 2020





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- EU countries have committed themselves to rolling out almost 200 million smart meters for electricity and 45 million for gas by 2020, leading to better information and savings for consumers
- The share of refrigerators in the highest energy efficiency labelling classes (A and above) increased from less than 5% in 1995 to more than 90% in 2010.

With the implementation of energy efficiency legislation and ambitious energy efficiency programmes in Europe, further benefits are expected in the future. They include:

- Lower demand for EU gas imports.
- Lower energy costs for people who live and work in energy efficient buildings, as well as additional benefits such as improved air quality and protection from external noise provided by energy efficient windows
- Targeted energy efficiency measures in buildings can help households with lower incomes to improve their living conditions
- Lower energy costs for companies, in particular energy-intensive industries
- Less need for additional generation and grid capacities with higher energy efficiency levels
- Boosting domestic energy efficiency investments will bring new business opportunities for European companies such as construction firms and manufacturers of energy-using or transport equipment, which is likely to have a positive impact on economic growth in Europe
- New jobs in construction, manufacturing, research, and other industries investing in energy efficiency.

Heating and cooling

Heating and cooling in our buildings and industry accounts for half of the EU's energy consumption. Moreover, 84% of heating and cooling is still generated from fossil fuels, while only 16% is generated from renewable energy. In order to fulfil the EU's climate and energy goals, the heating and cooling sector must sharply reduce its energy consumption and cut its use of fossil fuels.

In February 2016, the Commission proposed an EU heating and cooling strategy. This is a first step in exploring the issues and challenges in this sector, and solving them with EU energy policies.





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Financing energy efficiency

The EU has support schemes and initiatives to accelerate energy efficiency investments.

Related documents

- [Energy Efficiency Communication \[COM\(2014\)520\] and Annexes](#)
- [Energy Efficiency Plan \[COM/2011/0109\]](#)
- [Energy Efficiency Plan Impact Assessment \[SEC/2011/277\] | Annex 1 \[SEC/2011/278\] | Annex 2 \[SEC/2011/279\] | Summary of the Impact Assessment \[SEC/2011/280\]](#)
- [Energy Efficiency Communication Impact Assessment \[SWD\(2014\)255\] and Annexes I-VIII and Annexes VIII-IX | Executive summary \[SWD\(2014\)256\]](#)
- [Good practice in energy efficiency](#)

Related links

- Video: Clean energy for all Europeans – [energy efficiency](#)

Related legislation

- [Amending Energy Efficiency Directive \(EU\) 2018/2002](#)
- [Energy Efficiency Directive \(2012/27/EU\)](#)
- [Energy Performance of Buildings Directive \(2010/31/EU\)](#)
- [Energy Labelling Directive \(2010/30/EU\)](#)

[Ecodesign Directive \(2009/125/EC\)](#) Search for available translations of the preceding link





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A good example: 105 energy efficiency best practices made in Italy



“105 energy efficiency best practices made in Italy” is a volume edited by the Kyoto Club "Energy efficiency" working group. The book collects and presents over a hundred concrete cases in sectors ranging from industry to public administration, from residential buildings and non-residential to the tertiary sector, also including energy services, consulting, communication and education.





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Sustainable Civil Society Dialogue For Sustainable Development Project Monitoring Report

Part 2: Turkey's progress, present situation and shortcomings on the
Chapter 27 - Environmental Acquis of European Union

Prepared by: Environmental Energy Association
Compiled by: Hazal Coşkun

Programme: Civil Society Dialogue - V
Applicant: Kyoto Club
Co-applicant: Environmental Energy Association
Project Number: CSD-025





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| TURKEY | | |
|--|---------------------|---------------------|
| State of Play: 1 November 2016 | Negotiations Opened | Negotiations Closed |
| 1 – Free Movement of Goods | | |
| 2 – Freedom of Movement of Workers | | |
| 3 – Right of Est. & Freedom to Provide Services | | |
| 4 – Free Movement of Capital | 19 December 2008 | |
| 5 – Public Procurement | | |
| 6 – Company Law | 17 June 2008 | |
| 7 – Intellectual Property Rights | 17 June 2008 | |
| 8 – Competition Policy | | |
| 9 – Financial Services | | |
| 10 – Information Society And Media | 19 December 2008 | |
| 11 – Agriculture And Rural Development | | |
| 12 – Food Safety, Vet. & Phytosanitary Policy | 30 June 2010 | |
| 13 – Fisheries | | |
| 14 – Transport Policy | | |
| 15 – Energy | | |
| 16 – Taxation | 30 June 2009 | |
| 17 – Economic And Monetary Policy | 14 December 2015 | |
| 18 – Statistics | 26 June 2007 | |
| 19 – Social Policy And Employment | | |
| 20 – Enterprise And Industrial Policy | 29 March 2007 | |
| 21 – Trans-European Networks | 19 December 2007 | |
| 22 – Regional Pol. & Coord. of Structural Instr. | 05 November 2013 | |
| 23 – Judiciary And Fundamental Rights | | |
| 24 – Justice, Freedom And Security | | |
| 25 – Science And Research | 12 June 2006 | 38880 |
| 26 – Education And Culture | | |
| 27 – Environment | 21 December 2009 | |
| 28 – Consumer And Health Protection | 19 December 2007 | |
| 29 – Customs Union | | |
| 30 – External Relations | | |
| 31 – Foreign, Security And Defence Policy | | |
| 32 – Financial Control | 26 June 2007 | |
| 33 – Financial And Budgetary Provisions | 30 June 2016 | |
| 34 – Institutions | | |
| 35 – Other Issues | | |

The Chapter on Environment was opened to accession negotiations at the Intergovernmental Conference which was held in Brussels on December 21, 2009.





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Six closing benchmarks, one political and five technical, for the Chapter on Environment have been set in the EU Common Position. Technical closing benchmarks are provided below:

1. Turkey fulfils her obligations stemming from the Additional Protocol to the Association Agreement between Turkey and the EU (political criteria).
2. Turkey adopts legislation aimed at transposing the EU's horizontal and framework environmental legislation, including its transboundary aspects,
3. Turkey adopts legislation aimed at transposing the acquis in the field of water quality, notably its Framework Water Protection Law; establishes River Basin Protection Action Plans; and makes further significant progress in legislative alignment in this sector by adopting implementing legislation,
4. Turkey adopts legislation aimed at transposing the acquis in the field of industrial pollution control and risk management,
5. Turkey continues its alignment with the acquis in the remaining sectors of this chapter, including nature protection and waste management, in line with the Plan for Setting up Necessary Administrative Capacities at National, Regional and Local Level and Required Financial Resources for Implementing the Environmental Acquis and demonstrates that it will be fully prepared to ensure the implementation and enforcement of the EU requirements at the date of accession,
6. Turkey continues capacity building of the administrative bodies at all levels, including inspection services, in line with the Plan for Setting up Necessary Administrative Capacities at National, Regional and Local Level and Required Financial Resources for Implementing the Environmental Acquis, further improves coordination of work and demonstrates that all appropriate administrative structures will be in place in good time before accession to enable implementation and enforcement of the acquis in all sectors of this chapter.

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Turkey's Progress on EU Environment Acquis

Since 2007, the developments of climate change alignment to EU legislation has been varied. Turkey's alignment to the acquis and the position of Turkey in international negotiations dealt with together.

EU Integrated Approximation Strategy (UÇES) (2007-2023) contains detailed information concerning the technical and institutional infrastructure to be developed as well as environmental improvements and arrangements to be carried out in Turkey in order to ensure alignment with the EU's environmental *acquis* and its effective implementation which all-together constitute a precondition for accession to the EU. In this regard, UÇES sets out objectives, targets, strategies and activities to be undertaken in Turkey in the priority areas including water, solid waste, air, industrial pollution control, nature protection and horizontal sector. According to UÇES, the cost of investments necessary to ensure alignment with the EU's environmental *acquis* (excluding chemicals and noise sectors) is estimated to be approximately 59 billion Euros. It is foreseen that 80 % of the aforementioned investments required in the environment sector will be carried out by the public sector while the remaining %20 will be carried out by the private sector.

The major EU environmental policy areas and the main EU legislation related to these areas are as follows

| | |
|--------------------------------|-------------------------|
| Horizontal Legislation | Waste Management |
| Air Quality Legislation | Chemicals |
| Water Quality | Noise |
| Nature Protection | Climate Change |





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The fundamental principles of this EU Integrated Approximation Strategy (UÇES) (2007-2023):

- The right to live in a healthy and balanced environment
- The integration between the sectors
- The polluter pay
- Taking pollution prevention measures
- Protection of natural resources
- Sustainable Development
- Cooperation between private and public sector
- Increasing the environmental consciousness and the public participation

In 2011, National Action Plan on Climate Change till 2023 has been acknowledged. Within this plan, no national objective greenhouse emission reduction has been adopted. In this area, the most important obstacle is the lack of the national objective.

In 2012, the environment topic of the progress report has been changed for the first time and climate change got into the topic. The first report with the "climate change" criticized Turkey who is one of the biggest greenhouse emission countries and still has not got a reduction objective for 2020. EU emphasized that Turkey should take more steps towards the alignment to EU acquis and its implementation.

PRESENT SITUATION

The General Appearance of the Environment in Turkey

3 Together with air, water, sea and soil pollution due to excess utilization of nature and natural resources, noise concerning people's psychological structure closely are negative elements arising because of industrialization and urbanization. Urbanization rate which was 51,2% as of year 1990 reached to 61,3% in year 2000. If urbanization rate continues to increase like this, urban population in Turkey will reach to average of that of EU members in 2015.

Despite the rapid increase of population, urbanization and industrialization, it is an unavoidable fact that problems related water trouble will increase if necessary precautions are not taken in near future due to being limited of water resources meeting the demand.

At present, water amount per capita is estimated as 1500 m³ approximately, and when population reaches to 87 million within 20 years, annual water amount per capita will be 1042 m³. Being close of this number to 1000 m³, which was defined amount for water problem according to international criteria, is an important point. It is understood that to keep annual water amount per capita around 1000 m³ is very difficult when we consider the approximately 100 million population prediction of TÜİK about Turkey. An increase around 32.9% in water amount drawn from surface and





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groundwater resources between the years 1995 and 2002 shows that there will be a pressure on resources in order to meet water demand.

Removing of existing deficiencies in order to decrease unbilled water due to leakage and losses is another important issue. Illegal and excess drawing of groundwater, insufficiencies in sanctions and inspections, water pollution originated from pesticides and fertilizers make protection of groundwater resources necessary. In recent years, there have been important developments in disposal of wastewater in big cities especially, since taken precautions cannot match up the rate of industrialization and urbanization, problems continue to become more important.

It is worthwhile to say that legal arrangements related to domestic wastewater are in compliance with Urban Wastewater Treatment Directive of EU dated 1991. Discharging of sewage and wastewater of industrial facilities into surface water without treatment causes various problems. Total 87 Organized Industrial District is active, and in 41 of them wastewater problem is solved. 17 of these Organized Industrial District made a connection to sewage system of related municipalities. When the infrastructure construction services of water and sewage in Turkey used to be conducted under the leadership of the Bank of Provinces until 1980s, a new trend in water management is that private sector takes role in offering these services apart from local administrations. Foundation of special-purpose water and sewage administrations can be given as an example to localization in this area. Although average population density is 73 people per km² in Turkey, this density is 127 people per km² periodically in the cities located by the seaside. In addition, 70-80% of all industrial products are provided from these cities.

Turkey is one of the countries that have the longest shoreline of Europe with its 8333 km shoreline. The seas surrounding Turkey on three sides are faced with pollution problem. Some of the pollution in seas is land originated but other than that the pollution originating from the land, marine vehicles also play a role. Shores of Turkey is under the threat of pollution problems originated from discharging of domestic and industrial solid and liquid wastes, sea transportation, filling of shores with various purposes, disasters like earthquake and flood. The most used method to solve solid waste problem in Turkey is random storage of wastes on a suitable area. Land filling, composting, incineration or recycling methods are not widespread. Site selection for landfill areas also proves to be one of the important problems. Furthermore, hazardous 4 wastes, medical wastes and special solid wastes also constitute another important dimension of the problem. Directive on Medical Waste Control and Directive on Hazardous Waste Control are not put into practice as required, sometimes medical wastes are collected with domestic wastes.

In the scope of special waste management, necessary institutional structuring for collection, recycling and disposal of waste mineral oils along with waste battery and accumulators in line with the "Producer's responsibility" has been completed. For this purpose, four associations that were





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vested with the authority are active. On the other hand, there is need for legal arrangements, which will be in response to directives relative to disposal of end-of-life vehicles, waste electrical and electronic equipment, PCB/PCT taking place in the list of EU's special wastes. Studies about the recycling of packaging wastes were initially started in 1991. With Directive on Packaging and Packaging Wastes, a new era has started and all packaging were included in this scope. The implementation is based on the responsibility of the brand owner and the collection of the packaging waste separately at the source.

The fact that there are numerous local administration units in the same region makes the cooperation and coordination among these units with respect to providing the solid waste service imperative as it is in infrastructure related services. The local administration union model encouraged with new legal arrangements attracts attention as a structure that makes implementation of environmental services at local level easier. Practices of corporations founded by municipalities that are faced with similar environmental problems are important in terms of using time and financial resources more efficiently.

In this framework, an increase has been observed in the number of solid waste projects performed by local administration units. In addition, within the scope of the regional development policies, it is recommended that local administration union model is used in resolving the environmental problems on regional scale. Not being conscious of local administrators and public about recycling of solid wastes originated from industrial facilities or settlement areas means that an important economic resource cannot be used.

First directive related to control of medical wastes came into force in 1993 and some deficiencies, which are especially emanated from municipalities, about implementation of directive are points of issue.

Despite important developments about transportation, temporary storage and collection of medical wastes at their sources and separately from other wastes in health organizations, similar developments have not been occurred in municipalities that are responsible from properly disposal of medical wastes and until now treatment plant in sufficient number and technical capacity have not been established yet., Intensive urbanization, rapid increase in population, false settlement of cities according to topographical and metrological conditions and usage of poor quality fuels cause formation of air pollution.

Basic reasons of air pollution emanated from heating in winter months can be classified as usage of poor quality fuels without recovery process, appliance of wrong incineration techniques and not being made of operation maintenance of furnaces regularly. While designing an industrial plant, to consider only incentive factors for economic convenience increases negative effects of air pollution. Exhaust gases emanated from increased motor vehicles are also an important problem for which





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necessary precautions must be taken for air pollution in cities. Generally, 70-90 % of carbon monoxide (CO) emissions, 40-70 % of nitrous oxide (NO) emissions, about 50 % of hydrocarbon (HC) emissions and 100 % of lead emissions in cities are emanated from motor vehicles.

The air quality in the country is measured generally by using the semi-automatic measurement devices that belong to the Ministry of Health and it is observed in 31 fully automated measurement stations that were established in 2005 by Ministry of Environment and Forestry, the fully automated air quality measurement stations are planned to be used widely in 81 provinces in year 2006. Noise emanated from transportation vehicles, y+ equipment of domestic lignite used in coal-based thermal centrals are important problems.

5 When current situation of chemical industry is investigated, if necessary precautions are not taken during the process from production of hazardous chemicals whose usage is inevitable in chemistry sector to disposal of them, chemicals will have negative influence on environment and people health. Important components threatening soil resources in Turkey can be classified as erosion decrease in organic material, soil pollution, hydro geological risks, salinity, biodiversity, and land loss.

Turkey has a rich biodiversity due to its geographical situation. Climate difference, topographical variation, geological and geomorphologic differences, diversity in water medium like sea, lake and river, elevation differences between 0 m and 5000 m and existence of three different geographical vegetation regions have a role in this abundance. 120 mammal species, more than 400 bird species, about 130 reptile and 400 fish species exist in Turkey. There are also 1787 animal species in the seas surrounding Turkey. From present 250 wetlands, 81 of them have international importance and 18 of these 81 places were accepted as class "A" wetland, 76 of them were defined as important bird areas. In all there are 256 different grain types as 95 wheat, 91 corn, 22 barley, 19 rice, 16 sorghum and 2 rye types.

Turkey has an important place in respect of abundance of endemic species. It was defined that there are more than **3000 endemic plant species**. This number is equal to one third of all plant species in Turkey. **75 % of all plant types available in Europe are grown in Turkey.**

Although Turkey is rich in respect of species diversity, it is impossible to say same things for amount of these species. Industrial and domestic pollution, drying and improvement works, excessive and illegal fishing, unconscious hunting, uncontrolled cutting and burning of rush, pressure originated from tourism activities give considerable damage to biological diversity. Sea pollution emanated from residential areas and industrial plants also constitutes one of the important problem fields. Accidents in our seas, petroleum leakage, tourism facilities, and road works are other factors which threaten biological diversity. Agricultural and stockbreeding activities like installation of irrigation





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systems, clearing a piece of land, utilization of pesticides for harmful species, excessive grazing place important pressure on biological worthy.

1. SECTORAL PRIORITIES AND POLICIES

1.2. Water Sector

Present Situation Turkey is a country that has population of approximately 70 millions. In the country there are 16 metropolitan municipalities with higher population than 500.000, 3.200 municipalities with lower population than 500.000 and over 37.000 village with lower population than 2.000. The social and economical conditions of the residential units demonstrate differences. According to the results of the Survey of Sewage System Statistics of Municipalities exercised in 2004 by TSI; it was determined that 1421 of 1911 municipalities are furnished services of sewage systems. In the year 2004, 47% of 2,77 billion m³ of waste water was discharged into the rivers, 39,3% to the seas, 4,2% to the dams, 1,9% to the lakes and ponds, 1,3% to the fields and 6,3% to other receiving environment by the municipalities which provide a sewage system service. 1,68 billion m³ of 2,77 billion m³ of waste water discharged from a sewage system was treated in the treatment plants.

Biological treatment was applied to 58,2% of the wastewater treated, physical tratment to 28.3% and advanced treatment to 13,2%. According to the results of the Survey of Drinking and Potable Water Statistics of Municipalities carried out in 2004, it was determined that 1910 of 1911 municipalities are furnished services of drinking and potable water supply systems. By the year 2004, 4,73 billion m³ of water was pumped by the municipalities that provides services of drinking and potable water supply systems in order to be distributed through the water supply systems. 42% of the water was pumped from the dams, 27,1% from the wells, 26,2% from the water sources, 2,9% from the rivers and 1,8 % from the lakes and ponds. In the year 2004, 2,08 billion m³ of the 4,73 billion m³ of water supplied in order to be distributed through the drinking and potable water supply systems was treated in the drinking and potable water treatment plants. 4,7% of the water treated was applied physical and 95,3% was applied conventional treatment. In order to be able to decide on the technology of a wastewater treatment plant, the characteristics of the receiving media is need to be known. Besides, biological or advanced treatment may be needed for the residential units with a equivalent population more than 10.000. Furthermore, in the wards with more than 2.000 habitants, a wastewater treatment plant shall be installed.





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Investment Needs in the basis of Directives of Water Sector (2007 – 2023)

| | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | TOPLAM | |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| Urban Waste Water Treatment | 18.083 | 687 | 717 | 770 | 798 | 833 | 859 | 880 | 957 | 1.112 | 1.179 | 1.227 | 1.260 | 1.303 | 1.332 | 1.303 | 1.443 | 1.423 | 18.083 | |
| Agricultural Nitrate | 270 | 15 | 15 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 270 | |
| Water Framework Directive | 1.550 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 92 | 92 | 92 | 1.550 |
| Quality of Water for Human Consumption | | | | | | | | | | | | | | | | | | | | |
| Quality of Surface Water Intended For Drinking Water* | 12.743 | 462 | 517 | 572 | 620 | 642 | 660 | 692 | 713 | 756 | 817 | 869 | 896 | 921 | 949 | 877 | 891 | 889 | 12.743 | |
| Methods of Surface Water Quality Measure and Analysis | | | | | | | | | | | | | | | | | | | | 0 |
| Dangerous Substances in Water Media | 1.300 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 1.300 | |
| Bathing Water Directive | 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 23 | |
| Treatment Sludge** | | | | | | | | | | | | | | | | | | | | 0 |
| Dangerous Substances in Ground Water | | | | | | | | | | | | | | | | | | | | 0 |
| Pprotection of Fish Life | | | | | | | | | | | | | | | | | | | | 0 |
| Pprotection of Shellfish Life Medias | | | | | | | | | | | | | | | | | | | | 0 |
| TOTAL | 33.969 | 1.332 | 1.417 | 1.526 | 1.602 | 1.659 | 1.703 | 1.756 | 1.854 | 2.052 | 2.181 | 2.281 | 2.342 | 2.410 | 2.467 | 2.367 | 2.521 | 2.499 | 33.969 | |

*12.743 EURO that is stated here shows the total costs for the implementation of the Directive on the quality of the waters for human consumption as well as the Directive on the quality of the surface waters that drinking water intended for abstraction, as an indicator.

** The costs are indicated in the Urban Wastewater Treatment Directive

2. Waste Sector

2.1. Present Situation

According to the results of Municipality Solid Waste Statistics Questionnaire of the year 2004 which was administered by TÜİK (Turkish Statistical Institute, TURKSTAT) , the amount of solid waste collected was 12,3 million tons in the summer of 2004 and 11,9 million tons in the winter of 2004, with an annual amount of 24,2 million tons. According to these results, the average daily solid waste quantity per capita was 1,34 kg in average. Among the total amount of 24,2 million tons of solid waste collected in 2004 from the municipalities which give solid waste service, 46,7 % of the disposal was to the municipal dump sites, 28,9% was to landfills, 15,6% was to metropolitan municipality dump sites, 3% to other municipal dump sites, in addition, 1,6% was buried, 1,4% was composted, 0,3% was incinerated outdoors, 0,4% was dumped to streams and lakes. According to these data, approximately 30% of domestic solid waste is disposed to landfills.





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Table 5.2.5 Waste Sector Investment Needs By Directives (2007 – 2023) (Million Euros)

| | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Landfill | 7.574 | 200 | 245 | 345 | 345 | 345 | 400 | 425 | 475 | 500 | 500 | 500 | 500 | 550 | 550 | 550 | 550 | 594 |
| Packaging | 655 | | 41 | 41 | 40 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| Incineration | 1.257 | | | | 89 | 89 | 89 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Hazardous Waste | 74 | | | | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| TOTAL | 9.560 | 200 | 286 | 386 | 478 | 479 | 534 | 561 | 611 | 636 | 636 | 637 | 637 | 687 | 687 | 687 | 687 | 731 |

3. Air Sector

3.1. Present Situation

In Turkey especially during the months of winter air pollution makes itself felt due to the intensive urbanization, rapid population increase and industrialization, wrong placement of the cities according to the topographic and meteorological conditions. The main reasons for the pollution in winter that originates from heating is the utilization of low grade fuel without being subjected to the improvement processing, application of wrong burning techniques and the lack of maintenance on the furnaces that are used. However with the utilization of natural gas and other high grade fuel in heating, some improvement has been seen in the air pollution in the big cities compared to the 1990s. The wrong location selection by the industrial facilities in their establishment stage also contributes to the air pollution in the thermal power stations that are based on coal; the SO₂ emissions originating from high sulphur content of domestic lignite constitute a risk. With respect to the air pollution that is faced with in the cities, the harmful exhaust gases released by the ever increasing motor vehicles play an important role and precautions must be taken in this area. Generally the 70-90 percent of carbon monoxide emissions (CO), 40-70 percent of nitrogen oxide, 50 percent of hydrocarbon (HC) emission, as well as 100 percent of lead emissions in the city centers are caused by the motorized vehicles.

The air quality in the country in general is measured by using the semi-automatic measurement devices that belong to the Ministry of Health and it is observed in 31 fully automated measurement stations that were established in 2005 by Ministry of Environment and Forestry, the fully automated air quality measurement stations are planned to be used widely in 81 provinces in year 2006. The work related with air quality is being carried out within the scope of By-law on Air Quality Control published on 02.11.1986 dated and 19269 numbered Official Gazette. However the following By-laws have been issued by the Ministry of Environment and Forestry and furthermore the air quality related provisions of By-law on Air Quality Control are still effective; By-laws on Control of Air Pollution Arising from Heating published on 13.01.2005 dated and 25699 numbered Official Gazette, By-law on Industrial Air Pollution Control published on 07.10.2004 dated and 25606 numbered





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Official Gazette, By-law on The Control of Air Pollution Arising from Motor Vehicles In Traffic published on 08.07.2005 dated and 25869 numbered Official Gazette, By-Law on the Quality of Petrol and Diesel Fuels published on 11 June 2004 dated and 25489 numbered Official Gazette. About making amendments on 09.08.1983 dated and 2872 numbered Environment Law at 26.04.2006 dated and 5491 numbered Law, “methods about the determination, monitoring and measurement of air quality and air quality limit values and measures taken to prevent limit exceeding, to make the public awareness and access to information and related jobs are determined by The Ministry of Environment and Forestry.

Table 5.3.5 Air Sector Investment Needs (2007 – 2023)

(Million Euros)

| | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | |
|--------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| Air quality Framework | 37 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 |
| Fuel Quality (98/70/EC)* | 391 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total(**) | 428 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 |

* : The implementation related to fuel quality is targeted to be completed due to the investments of Tüpraş.

** : Tüpraş's 391 millions Euros investment cost related to the fuel quality has not been included. due to the investments of Tüpraş

4. Noise Sector

4.1. Present Situation

The current situation of the noise pollution in our country cannot be evaluated in a comprehensive manner due to the specificity of the limited amount of field studies that are conducted by different institutions and because of the differences between the measurement tools and the methods. The noise pollution in our country originates from road, air, sea and railway traffic; from the fields of construction , industry and recreation; and from the entertainment places.

5. Nature Protection Sector

5.1 Present Situation

Located at the junction of the three continents, Asia, Europe and Africa, Turkey shelters a rich biological entity due to its geographical position. The source of this richness results from the climate differences, topographical diversities, geological and geomorphologic diversities, three different plant geographical regions and altitude differences in a relatively small area. The number of plant species is about 11.000 in Turkey, one third of which is known to be belonging to the endemic species specific to Turkey. The number of fauna species is predicted as 60-80.000 in Turkey. Turkey





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is known as the native country for many flora and fauna species. There exist 132 mammals, 457 birds and around 105 reptile species in Turkey. The two of the four important bird immigration routes in Palearctic region (between West Palearctic and Africa) pass over Turkey. 200 of the wetlands in Turkey have international importance, and 12 of these are included in the Ramsar Convention List. Although Turkey is rich in biodiversity, a decrease in population of existing species is observed because of the deterioration of their habitat. From the 450 fish species existing in our seas, 50 of them are under the threat of extinction. Throughout the country, there are 15 mammals, 46 birds, 18 reptiles and 5 frog species that are under the threat of extinction in Turkey.

Table 5.7.3 The Investment Needs For The Protection Of Nature Sector. (2007 – 2023)
(Million Euros)

| | Total | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------------------------|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Habitats and Birds Directives | 254 | 3 | 5 | 8 | 10 | 11 | 13 | 14 | 15 | 16 | 17 | 18 | 20 | 21 | 18 | 19 | 22 | 24 |
| Cites Directive | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| Zoos | 2 | | 1 | 1 | | | | | | | | | | | | | | |
| TOTAL | 264 | 4 | 7 | 10 | 11 | 12 | 14 | 15 | 16 | 16 | 17 | 18 | 20 | 21 | 18 | 19 | 22 | 24 |

6. Horizontal Sector (Environmental Impact Assessment)

6.1. Present Situation

The by-law on Environmental Impact Assessment was revised due to the conditions of our country and EIA Directive of the EU, and came into force after being published in 16.12.2003 dated and 25318 numbered Official Gazette. Studies for strengthening and increasing the effectiveness of Environmental Impact Assessment Process are still going on in our country. The Law on The Right to Access to Information has come into force in our country and in line with this law 19.04.2004 dated and 2004/7189 numbered By-law was published. Environmental Information System is established in the context of “Institutional Structuring and Access to Environmental Information” project, which is executed in the context of 2002 Financial Cooperation Program and by this way significant progress is realized in our country in compliance with the proactive approach of the EU Directive on Public Access to Environmental Information. A draft By-law on Strategic Environmental Assessment in compliance with EU SEA Directive is prepared. In order to make this by-law applicable, it is





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necessary to carry out pilot studies and capacity enhancing studies both in and out of the Ministry. Projects related to public consciousness should be performed.

Investment Needs

The necessary financial need for National Environmental Information Exchange Network and Environmental Information System to be created for providing effective Access to Environmental Information is 558 million Euros. (Software, hardware, technical support, the education of the personnel and the users, cost of studies for public consciousness are included.) The capacity development necessary for the application of By-Law on Environmental Impact Assessment costs 26 million Euros (hardware and software, personnel and education costs). The financial need for SEA is 17 million Euros including hardware, training and personnel costs.

https://www.joi.or.jp/modules/investment/custom/documents/TUR_EU_INTEGRATED_ENVIRONMENTAL_APPROXIMATION_STRATEGY.pdf

7. Climate Change

- In May 24 2004 Turkey became a party to united nations framework convention on climate change (unfccc) and in August 26 2009 became a party to Kyoto Protocol (KP).
- Regulation on Following Greenhouse Gases published on official gazette with number 28274 in April 25,2012.
- Turkey, Support Programme of Greenhouse Gas Emissions Follow Up, IPA-1, 2011.
- IPA-1,2013 – Capacity Building In The Field of Climate Change Project aims that EU legislation on F-gases transfer to domestic law.





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Photo: David Mark from Pixabay

Combating climate change is a top priority for Turkey and the EU. Turkey is among the countries at high risk from the effects of climate change, due to its unique geographical features but also its increasing and urbanised population, fast-growing economy, and dependence on imported energy. Three-quarters of greenhouse gas emissions, which have been on the increase since 2000, come from the energy sector and the fuel used in industry, transport, buildings, and agriculture. Similar to the EU, which aims to transform itself into a highly energy-efficient, low-carbon economy by 2020, Turkey is seeking to reduce its primary energy intensity by 20% (from 2008 levels) by 2023.

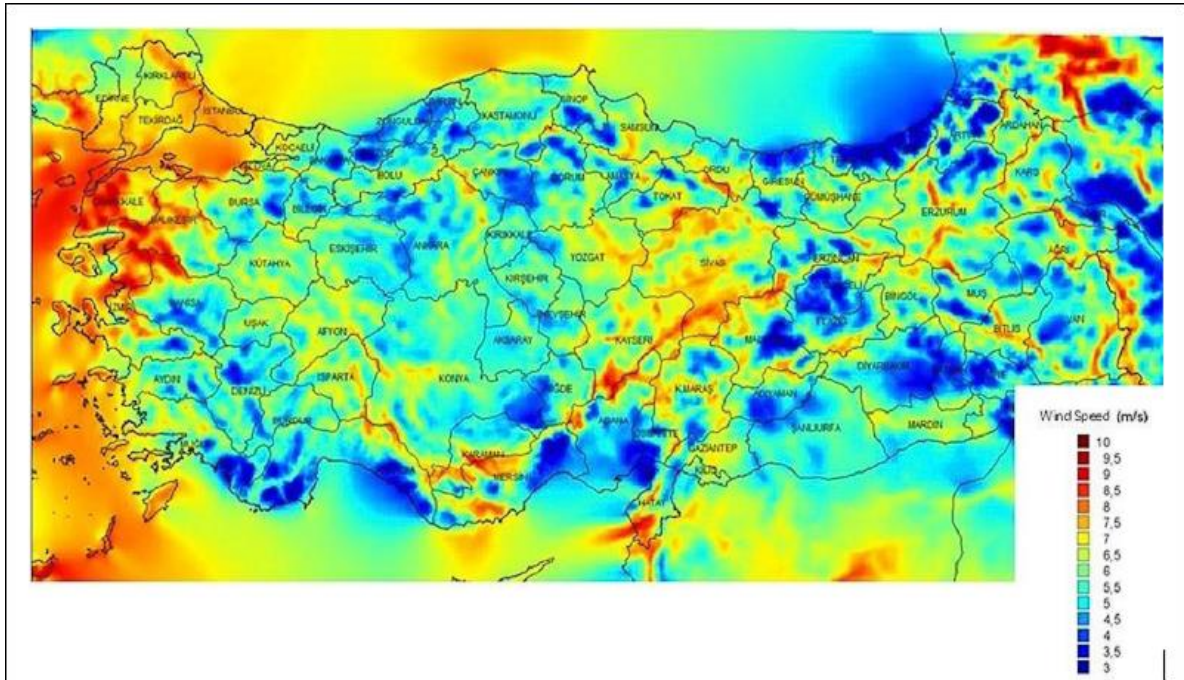




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Turkey launched a second wind farm tender as part of the Renewable Energy Resource Areas (YEKA) program and will announce the winner on May, 30.



Development Potential of Wind Power in Turkey





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Astronergy modules installed in a 4.3 MW solar park close to city of Cine in western Turkey.

Image: Astronergy



Adiyaman GES is the first PV Plant connected to the MV stage in Turkey.

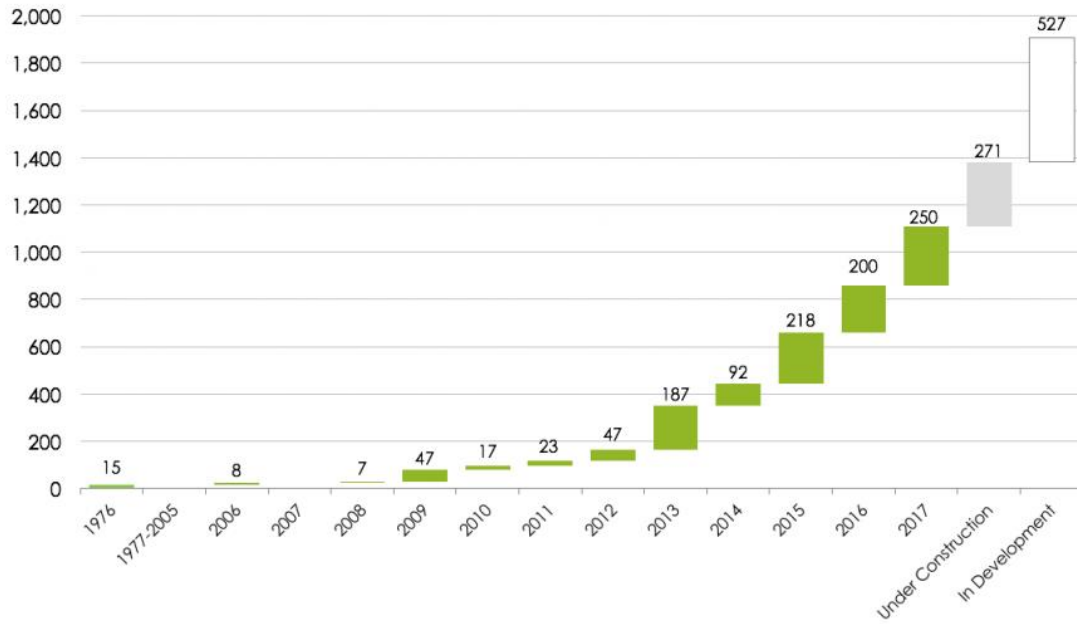




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GEOTHERMAL DEVELOPMENT - TURKEY

POWER GENERATION CAPACITY ADDITIONS BY YEAR (MW) + PLANNED



Source: JESDER (2018), Enerji Atlası (2018), TGE Research (2018)



Turkey privatizes five hydropower plants





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Turkey's Shortcomings and Progress on Chapter 27 – Environment and Climate Change (According to Turkey's Progress Report by EU / 2019)

Turkey has some level of preparation in Chapter 27. There has been some progress, mainly in increasing capacity in waste management and wastewater treatment and legislative alignment, but enforcement and implementation still remain weak.

More ambitious and better coordinated environment and climate policies need to be established and implemented. Strategic planning, substantial investment and stronger administrative capacity are required as well.

In the coming year, Turkey should in particular:

- complete alignment with the directives on water and industrial pollution, and ensure that the Environmental Impact Assessment Directive is correctly implemented;
- ensure alignment with the acquis on public participation and the right to access environmental information;
- ratify the Paris Agreement on climate change, and start implementing its contribution to the Agreement, and complete its alignment with the EU acquis on climate action.





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Environment

Turkey has achieved some level of preparation in the area of **horizontal legislation**. Implementation of the Directive on infrastructure for spatial information is still at an early stage. There are concerns on how the Environmental Impact Assessment Directive is implemented. There are still complaints about the application of the rule of law in court decisions on environmental issues and about public participation and the right to environmental information. Turkey is still not a party to the Aarhus Convention. The 2016 law that waived licencing and other restrictions for strategically important investment projects is a major concern. Procedures for transboundary consultations have not yet been aligned with the *acquis*. The Strategic Environmental Assessments Directive is currently aligned in some sectors. Alignment on environmental liability remains limited.

On **air quality**, national legislation aligning with the VOC Solvents Emissions Directive was adopted in 2018. National legislation still needs to be adopted in line with the current directives on ambient air quality and national emissions ceilings. Severe air pollution in some cities is reported on an annual basis. Local clean air action plans are being prepared for 64 provinces. A national strategy for air quality monitoring is in place and 7 out of 8 planned regional networks are operational. Air quality monitoring data is published online.



http://www.anabailao.com/tags/waste_management

The legal framework on **waste management** is mostly aligned. Turkey has adopted a strategy promoting a zero waste management approach, efficient use of natural resources, landfilling reduction and increased recycling and reuse. Legislation introducing a ban on the free distribution of lightweight plastic bags came into force in January 2019 and attracted substantial public interest. Work has continued to bring waste treatment facilities up to *acquis* standards. Alignment and capacity for sorting, recycling and medical waste treatment have increased. Significant efforts are





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necessary to implement waste management plans at local and regional level. Economic instruments to promote recycling and the prevention of waste generation are improving, but remain limited.

In the area of **water quality**, the level of alignment is advanced. Over 30% of water bodies were identified as sensitive areas. The preparation of management plans for four river basins 94 out of 25 has been completed. Transboundary consultations on water issues are still at an early stage. Wastewater treatment capacity has increased as a result of continuous investments. Alignment with the Marine Strategy and Bathing Water Directives is still pending.

The framework legislation on **nature protection**, the national biodiversity strategy and an action plan have yet to be adopted. Regulations allowing planning and construction in wetlands, forests and natural sites are still not in line with the acquis. The lists of habitats and species detected in Turkey under the Habitats and Birds Directives have been prepared. The institutional framework for managing future Natura 2000 sites needs to be streamlined and adequately resourced. Investments, particularly in hydropower and mining, need to comply with nature protection obligations, especially for potential Natura 2000 areas.

In **industrial pollution** and risk management, alignment with most EU directives and regulations is at an early stage. There is good alignment with the Seveso II Directive and the ecolabel regulation was adopted in 2018. Alignment with the Seveso III Directive, Industrial Emissions Directive, the eco-management and audit scheme, and the Paints Directive are still pending.



<https://www.conserve-energy-future.com/causes-effects-of-industrial-pollution.php>





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On **chemicals**, legislation on persistent organic pollutants was adopted in 2018. The legislation on the import and export of dangerous chemicals is yet to be adopted. The adoption of a regulatory framework to implement the Directive on the protection of animals used for scientific purposes has advanced.

Alignment with legislation on **noise** is well advanced. Preparation of noise mapping and local noise action plans are at an advanced stage.

Turkey has still not established the Common Emergency Communication and Information System (CECIS) since it joined the Union **Civil Protection** mechanism in 2016. Although required by the latter, Turkey has not yet submitted a summary of their national assessment.

Climate change

There was no progress in this area over the previous period. A national strategy consistent with the EU 2030 climate and energy framework has not yet been formulated, and mainstreaming of climate action into other sector policies is still weak. The existing national strategy and action plan only partially addresses climate change mitigation and only for the short-term. Turkey has still not ratified the Paris Agreement on climate change. Regarding its commitments under the UN Framework Convention on Climate Change, Turkey submitted its third biennial report on greenhouse gasses in January 2018. The latest national inventory was submitted in April 2018.

Turkey is not yet aligned with the Emission Trading Directive. Legislation aligning with the EU's economy-wide greenhouse gas monitoring mechanism still needs to be adopted. Further efforts need to be made to fully implement the legislation aligned with the Fuel Quality Directive and to initiate alignment on emissions standards for new cars. Turkey also needs to establish an alignment plan for the Carbon Capture and Storage Directive.

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