

Environment Report 2019



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introduction

The Bank of Italy's environmental policy objectives

In the last few years, fears have been growing about the sustainability of our development model i.e. the capacity to satisfy today's needs without compromising future generations' capacity to satisfy their own.

More recently, climate change has been the biggest concern, since its effects are already evident and public opinion is bringing strong pressure to bear. At global level, the last four years have been the hottest since 1880. In Italy, 2018 was the hottest year for two centuries, while 2017 was characterized by a sharp worsening of climate conditions, with significant episodes of drought across a large part of the country, with serious repercussions on water resources.

-63%Reduction in CO_2 emissions from 2010 to 2018

The Bank's environment policy objectives cover various areas. We have been working for several years now to reduce our ecological footprint through the rational use of energy resources, optimal waste management, sustainable mobility, green procurement and, more recently, a policy for sustainable investment. Furthermore, the Bank is actively promoting an environment-friendly culture not only in the workplace, by means of training and awareness initiatives for its

staff, but also by participating in conferences and in national and international working groups.

For the sectors of the Bank's activity that may have a significant environmental profile, specific certification has been obtained from external entities: the banknote printing process has been certified since 2004 under the international environmental standard ISO 14001; for the Centro Donato Menichella in Frascati, the site with the highest energy consumption (more than one quarter of the total), certification was obtained in 2018 under the international energy management standard ISO 50001.

The Bank's environmental policy objectives are achieved through a two-year programme of concrete activities. A task force, made up of experts from various functions in the Bank, organizes the activities and follows up on their progress. In 2018, a network was created at the Bank's branches for staff who

introduction

are passionate about environmental issues in order to encourage an exchange of ideas, best practices and the achievement of targeted actions. Furthermore, in June 2019 a new in-house working group was set up to deal systematically with the subject of sustainable finance across the Bank's different institutional functions.

The Environment Report

The Report describes the Bank's engagement in different areas and gives the results of the various initiatives by means of quantitative indicators calculated according to international guidelines. It provides an overview of both the improvements achieved and the areas requiring further attention.

The Bank' ecological footprint has been steadily reduced over time, also thanks to the new policy for sustainable investment. In 2018, emissions of CO₂ were once again at the lowest level recorded in recent years (Figure 1). These emissions, which were already halved in 2013 following the purchase of electricity from renewable sources (conventionally assigned a zero-emission rating), declined further compared with last year, thanks to a reduction in paper consumption.

CARBON FOOTPRINT – BANK OF ITALY

Carbon dioxide emissions (thousands of tonnes of CO₂)

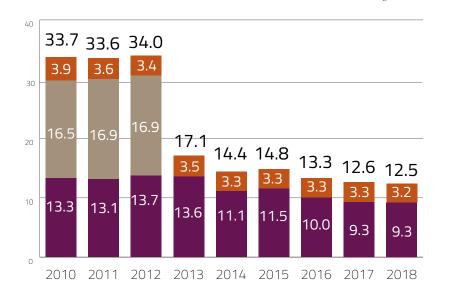


FIGURE 1

- Other indirect emissions (paper consumption and business trips)
- Indirect emissions (electricity consumption)
- Direct emissions (fuel consumption)



THE ENVIRONMENTAL POLICY OF THE BANK OF ITALY

The environment is a common good whose protection requires the commitment of all members of society, starting with the institutions. In accordance with its strategic vision and mindful of its responsibility to the community and to future generations, the Bank of Italy – in addition to ensuring compliance with the legal requirements in this field – is determined to steadily improve its environmental performance by pursuing the following objectives:

• Sustainable use of resources

- progressively improving the energy efficiency of the Bank's premises, technological systems and IT equipment;
- promoting the production of energy from renewable sources;
- reducing paper consumption and using water resources more sustainably.

• Optimal waste management

- reducing the production of waste at source;
- recovery of waste produced and, specifically, of shredded banknote waste;
- finding new solutions for goods no longer in use, including for social purposes.

• Sustainable mobility

- promoting the use of means of transport with lower environmental impact both for business travel and for staff who commute to and from work;
- increasing opportunities for remote working and communication online.

• Green procurement

- adopting a procurement policy that creates incentives for suppliers to have the best environmental and social practices, including in the field of workplace health and safety;
- procurement of work equipment and consumer goods with low environmental impact over their entire life cycle, if they meet all the functional requirements.

Environment-friendly culture

- training and ongoing awareness-raising;
- encouraging those with whom the Bank of Italy interacts to pay more attention to environmental issues;
- analysis and research on environmental themes and cooperation with other institutions.

This commitment will take the form of:

- periodic planning of objectives and concrete improvements;
- innovative and effective logistical, technical and management solutions;
- appropriate tools for monitoring and control;
- systematic measurement of all the main environmental indicators;
- periodic and transparent information on the commitments undertaken and the outcomes.

The management and staff of the Bank of Italy are firmly committed to this path of improvement; the results achieved will be analysed periodically in order to define future courses of action.

Rome, September 2015

THE GOVERNOR



energy

The Bank's objectives of reducing energy consumption, achieving greater energy efficiency, and promoting the use of renewable resources are pursued not only through extraordinary maintenance work on buildings and technological installations but also by adopting new operating procedures.

Maintenance and operating procedures

The Centro Donato Menichella is the site that consumes the most energy (more than a quarter of the total), mainly because it houses one of the Bank's

- 1 0%
Reduction of
energy consumption
from 2014 to 2018

two data processing centres. The Centre has an energy management system which has been certified under the international standard ISO 50001. Besides the installation of a sophisticated system to measure and monitor consumption, a number of interventions are under way to increase energy efficiency. In 2018 numerous LED light fittings were introduced: this has led to savings of about 370,000 kWh per year. The programme to replace traditional light bulbs, still

under way, will likely reduce electricity consumption by a further 300,000 kWh per year.

To achieve better energy efficiency levels at the Largo Bastia site in Rome, which houses the other data processing centre, heat-blocking film has been applied to windows; the roof insulation work is almost finished.

In each of the two data processing centres, five high-efficiency modular units (islands) were installed, which together provide around 40 per cent of the overall processing power. At the banknote production plant in Rome, ranked second for energy consumption, new evaporation towers have been installed to disperse the heat produced by the air-conditioning systems. In addition to halving the quantity of industrial water used, this will save an estimated 100,000 kWh of electricity on average per year at the plant.

At Palazzo Koch in Rome, some fittings have been replaced with more energy-efficient alternatives and further changes have been made to the technological installations. In 2019, during the summer, some of the heat produced by the refrigerating units of the air conditioning system was recovered and used to



produce domestic hot water. In the same period, this technological solution offset the corresponding amount of natural gas and related emissions. The central heating system will be renewed in 2020 with expected gains in terms of lower gas consumption and greater efficiency.

In many of the Bank's buildings in Rome and in the branches a project is under way to replace traditional light bulbs with LED light fittings, which consume less energy and last longer. Work is also continuing on converting oil-fired heating systems to natural gas, with advantages in terms of greater efficiency and lower emissions of pollutants. After the Florence branch, a natural gas heating system was installed at the Salerno branch. The last two oil-fired





systems still in use (excluding the branches in Sardinia) will be converted to gas in the next few years.

With a view to achieving greater energy efficiency, a number of buildings have undergone extraordinary maintenance work such as: the renewal of the heating and cooling installations and related regulation and management systems; the replacement of some windows with much more energy-efficient alternatives; and even better insulation of the building covers. Some of the projects were achieved or scheduled thanks to the energy audits made of the various buildings.

Works

The complete overhaul of the building and installations of the premises at Via delle Quattro Fontane in Rome is at an advanced stage and will be completed in 2020. The energy class of the building will be considerably improved and will likely be upgraded from energy efficiency class F to class B as a result of: the insulation of vertical and horizontal masonry; the installation of doors and windows with high-performance insulation; the adoption of systems to recover thermal energy; the use of led light bulbs; the production of domestic hot water using heat pump systems; automatic heating/cooling plant management on the basis of external climate parameters and the actual numbers of staff in the building at the time.





Extraordinary maintenance work has begun on the facades, covers and the heating, lighting and water systems of the premises at Via Milano 60 in Rome, which will make a considerable improvement to the energy efficiency of the building, which will be upgraded from energy class E to A2.

Renewable sources

Since 2013 the Bank has bought its electricity exclusively from certified renewable sources.

The Bank's two photovoltaic installations - one at the banknote production plant and the other in the Catania branch building have led to totally autonomous electrical energy production of 26,750 kWh and 13,500 kWh respectively.

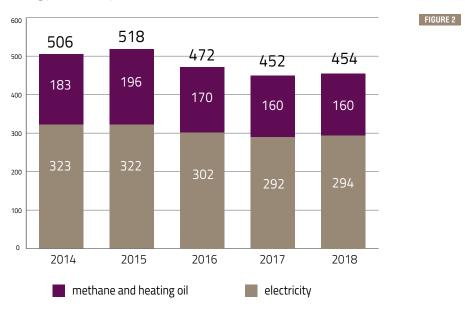
A third photovoltaic plant was installed in 2019 at the Catanzaro branch and by the end of 2020 a fourth will be installed at the Centro

Donato Menichella, enabling it to generate about 380,000 kWh per year.

Share of electricity from renewable sources in 2018

ENERGY - BANK OF ITALY

Total energy consumption (terajoules)





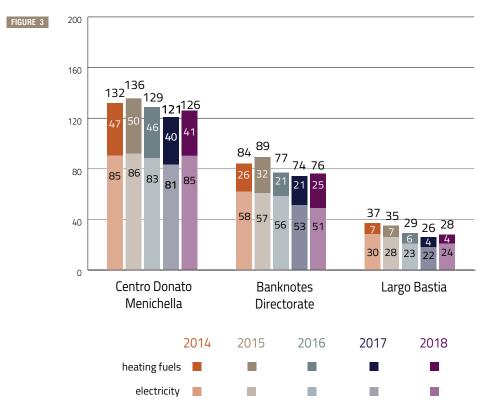
Awareness-raising

In February 2019 the Bank participated in Energy Saving Day, turning off the external lighting of its buildings and encouraging staff to make changes to their everyday behaviour to help protect the environment. In addition, on 30 March, together with the other European central banks, we joined in the global Earth Hour promoted by the World Wildlife Fund.

Energy consumption

There was a slight increase in the consumption of electricity in 2018 compared with the previous year, while that of heating fuels (almost entirely natural gas) remained constant (Figure 2). Analysing the situation, as shown in Figure 3, we see an increase in electricity consumption in particular in the two sites that host the Bank's data processing centres. This increase is due to numerous

ENERGY – BANK OF ITALY Total energy consumption (terajoules)





replacements of technological infrastructure (e.g. servers and networks) that meant that the old and the new computers had to run in parallel. There has also been an organic growth in ICT infrastructure, including as a result of new tasks which require greater processing power. The 2018 trend continued into the first half of 2019.

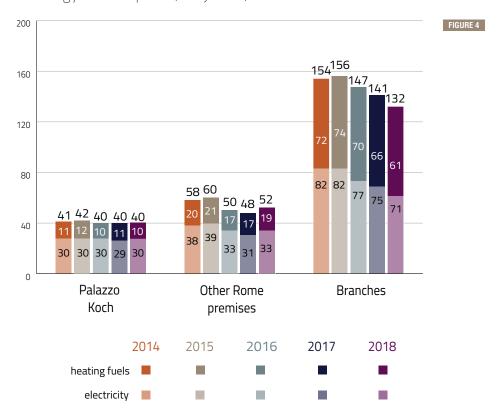
Figure 4 shows the data on the buildings mainly used for office work: the consumption of energy and heating fuels was the same as last year at Palazzo Koch, while there was an increase in electricity and natural gas consumption at the Bank's other Rome premises.

Energy consumption at the Bank's branches fell by more than 6 per conscent compared with 2017.

Reduction of energy consumption at the branches from 2014 to 2018

ENERGY - BANK OF ITALY

Total energy consumption (terajoules)



water

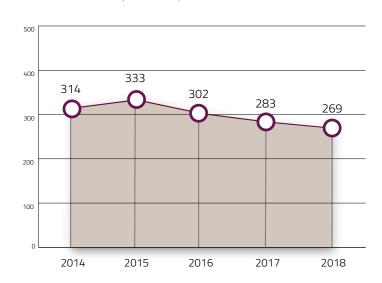
-14%Reduction of potable

water consumption from 2014 to 2018 On the premises, water is mainly used for domestic purposes. If possible non-potable water is used for irrigating the green areas or for industrial purposes (for banknote production and in the air-conditioning systems).

In 2018 total potable water consumption was 269,000 cubic metres, about 5% down on the previous year (Figure 5).

WATER – BANK OF ITALYConsumption of potable (thousands of cubic metres)





The three main buildings consume more than 40 per cent of the total potable water used (Figure 6).

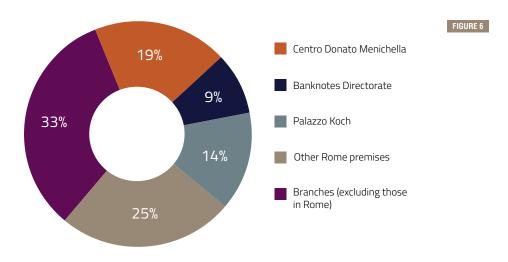
At the Centro Donato Menichella, there was a drop in consumption of both potable and non-potable water (Figure 7).

Water consumption was also reduced at Palazzo Koch.



WATER - BANK OF ITALY

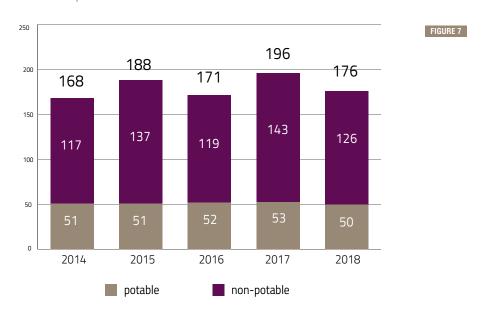
Total potable water consumption (per cent)



At the banknote production plant, water consumption was approximately 23,000 cubic metres of potable water and 78,000 cubic metres of non-potable water, down on the previous year.

WATER - CENTRO DONATO MENICHELLA

Water consumption (thousands of cubic metres)



paper

The Bank produces a wide range of documents: external correspondence, reports, bulletins, and financial education material.

-26% Reduction in the supply of paper for office use from 2014 to 2018

Office paper

Over the years, there have been numerous projects to dematerialize paper documents and to streamline processes. With the digitized document management system, which includes electronic signatures and certified email, all of the Bank's internal correspondence has been digitized. External correspondence is

PAPER – BANK OF ITALYSupplies of A3 of A4 reams of paper for office use





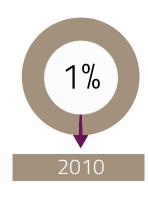
mostly via email, although a small share – about 13 per cent in 2018 – comprises paper copies of electronically-signed letters.

With the gradual introduction of new IT processes to support accounting activities in the branches, in the coming years it will be possible to achieve an annual saving of around 5,000,000 sheets of paper: the objective is to work towards the complete dematerialization of the documentation used in the various branch activities.



PAPER - BANK OF ITALY

Recycled paper as a share of the total



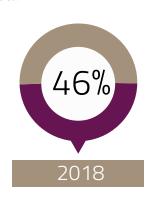


FIGURE 9

In order to reduce the quantity of paper used, since 2014 the Bank has been purchasing packs of white paper weighing 75 grams per square metre rather than the standard 80-gram packs. Since 2018 the Bank has only purchased white paper with the EU's 'Ecolabel' quality certificate, which certifies compliance with the highest environmental standards at all stages of production.

To raise awareness among staff members of the need to reduce printing volumes and to encourage them to make greater use of IT tools, for the second year running, a 'No Paper Day' was held: on this day there was a

26 per cent reduction in printing compared with an ordinary working day.

In 2018 purchases of packs of paper for office use were at their lowest level for five years (Figure 8).

For several years now, it has been possible to use packs of A4 paper made entirely from post-consumer recycled fibres, with eco-certification by the EU's Ecolabel and Germany's Blue

Angel, and manufactured in an EMAS-certified factory. In 2018 recycled A3 paper was also purchased. Recycled paper accounted for about 46 per cent of total purchases during the year (Figure 9), slightly less than in the previous year. The 7 branches of Aosta, Bolzano, Catanzaro, Genoa, Padua, Reggio Calabria and Turin bought exclusively recycled paper. Another 4 branches purchased more than 90 per cent of recycled paper.

13.7
Average number of A4 sheets consumed daily per employee

Publications

All of the Bank's publications are available on its website. Thanks to the introduction of new digital printers, in 2018 a print-on-demand policy was introduced for all the Bank's publications, which led to a further reduction in paper consumption (Figure 10) and greater efficiency levels.

For a limited number of publications, including those distributed on the occasion of the Governor's annual 'Concluding Remarks' speech, paper copies are printed for those in attendance. Print runs of these publications have been gradually reduced over the years: for example, for the Annual

-450 Reduction in the amount of paper used to print the the Bank's publications from 2010 to 2018 Report, the number of copies printed has gone down from 12,000 in 2007 to 2,700 in 2019. For these publications eco-certified paper is used, bearing witness to the reduced impact on the environment of its production process.

PAPER - THE BANK OF ITALY'S PRINTING CENTRE

Paper used for publications (thousands of kilograms)

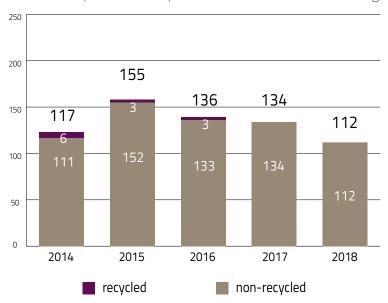


FIGURE 10



waste

The priorities for waste management are to reduce the quantity of waste at source and to promote re-use, recycling or energy recovery rather than disposal in landfills.

Office waste (paper, plastic, empty toner cartridges, and dead batteries) and that from staff canteens (leftover food, glass, plastic, and metal containers) are separated and sent for recycling. As in previous years, uneaten meals prepared in the staff canteens were donated to charitable organizations (more than 17,800 meals were donated by the canteen at the Centro Donato Menichella).

At the Bank's offices in Rome there are collection points for employees' used glasses and mobile phones. In 2018, 300 pairs of glasses were donated to a non-profit association, which sorts them and sends them on to people in developing countries, while the 115 mobile phones were donated to a non-profit association that helps people with disabilities to find work.

Further, in order to make beneficial social use of used goods, in 2018 more than 780 items of furniture, which were no longer fit for purpose in the Bank, were donated to schools and non-profit associations upon request.

The Bank of Italy is plastic free

Plastic makes up the bulk of the rubbish washed up on our beaches, found floating in the sea or at the bottom of the ocean. Not only is it a threat to marine species and ecosystems, but it is also poses a risk to human health, with significant implications for large sectors of the economy.

In 2019, the Bank initiated a project to become plastic free, by progressively reducing the use of single-use plastic products. In all the Rome-area offices and in the various branches, the following changes



have been made: the plastic cups at hot drinks machines have been substituted with compostable paper cups; single-use plastic plates are no longer provided in the staff canteens and single-use cups have been replaced with re-usable ones; at all the events organized on Bank premises, only glass bottles and drinking glasses are provided. By the end of 2019 drinking water dispensers will have been installed in the staff canteens and re-usable steel water bottles will be supplied to all employees.

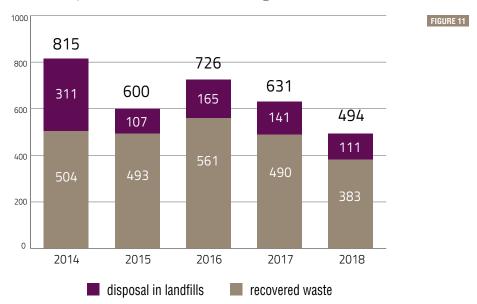
Special waste

Special waste originating from the printing of the Bank's publications and the banknote production plant is managed so as to recover as much as possible from it (through recycling and waste-to-energy processes) and, at the same time, to minimize landfill waste.

Figure 11 shows the quantity of special waste generated by banknote design and printing. In 2018 more than three quarters of the waste produced was allocated for recycling.

WASTE – BANKNOTES DIRECTORATE

Special waste produced (thousands of kilograms)



shredded banknotes

The Bank of Italy prints banknotes at the production plant run by the Banknotes Directorate. At the Currency Circulation Management Directorate in Rome and at 34 branches, the banknotes in circulation are periodically sorted to ensure that the quality standards for cash are maintained. During the sorting process any banknotes that are worn or damaged – and therefore unfit for circulation – are shredded.

WASTE – BANK OF ITALYProduction of waste from shredded banknotes (thousands of kilograms)

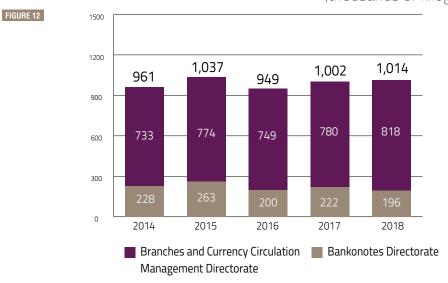


Figure 12 shows the amount paper waste produced in the last five years as a result of the banknote production process (scrap paper, trimmings and paper used to start up the printers) plus waste consisting of worn banknotes that have been shredded at the end of the sorting process.

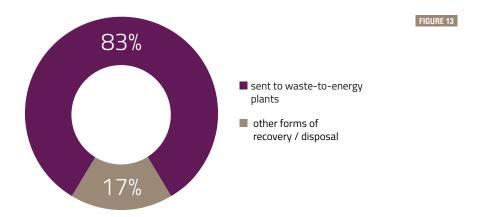
In line with the other Eurosystem central banks, the Bank promotes the recovery of energy from this kind of waste, which is the most environmentally effective way of dealing with it. In 2018, 83 per cent of shredded banknote waste was sent to waste-to-energy incineration plants (Figure 13).

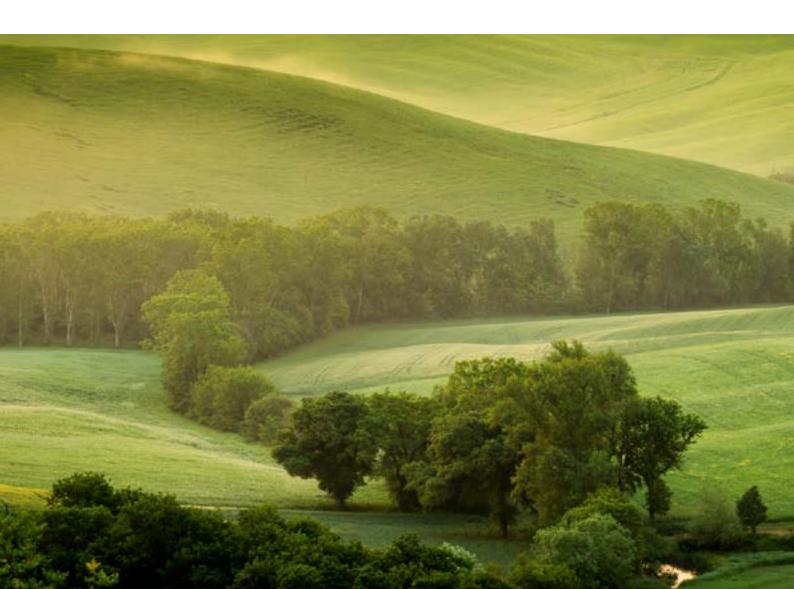


shredded banknotes _

WASTE – BANK OF ITALY

Percentage by weight of shredded banknote waste





sustainable mobility

Using different means of transportation to travel to work and for business trips has an impact on the environment in terms of ${\rm CO_2}$ emissions and pollutants.

Travelling to work

To reduce the impact of travelling to and from work, the Bank encourages teleworking (Figure 14) and remote working (1,379 beneficiaries in 2018).

MOBILITY – BANK OF ITALY

Number of teleworkers

FIGURE 14







The Bank also encourages the use of electric vehicles for getting to work: staff can use the 25 charging points installed at the Bank's main offices in Rome and Frascati. In 2019, staff at the Centro Donato Menichella in Frascati could make use of a new car pooling service to encourage colleagues to share their private vehicles with the aim of reducing polluting emissions as well as cutting travel costs. Special rates for staff were negotiated with leading car- and scooter-sharing firms for individual mobility.

sustainable mobility

Business travel

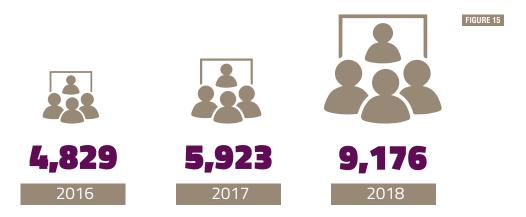
To reduce business travel and associated emissions, the number of the video conferencing systems available in the Bank's main offices has risen to 120. In 2018 there were more than 9,000 video conference link-ups (Figure 15), equivalent to a total of around 2,870 meetings: 18 per cent of the meetings were held with national institutions and 15 per cent with international contacts.

391 Carbon footprint in kg per employee for business travel

In 2018 the policy to substitute obsolete company cars with electrically powered vehicles for hire continued. The number of electric cars was increased to 16, of which 5 for use by staff travelling between the offices of Rome and Frascati.

MOBILITY – BANK OF ITALY

Number of video conferences



In addition, car-sharing agreements were reached with the City of Rome for work mobility and a company bike-sharing service with 10 electric bicycles for travel between the Rome offices. In the light of the success of this initiative, the number of electric bikes will be further increased.

With the aim of increasing staff awareness of the environmental impact of business travel, the hotels offering special deals for Bank staff were given an environmental sustainability rating, which is updated annually and compiled on the basis of the results of a questionnaire.

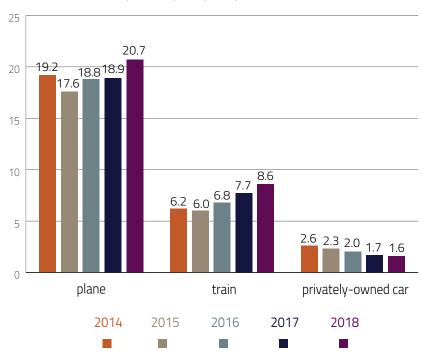
sustainable mobility



BUSINESS TRAVEL – BANK OF ITALY

Comparison of distances travelled by transport mode from 2013 to 2017 (km x 1,000,000)

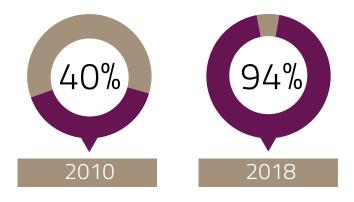
FIGURE 16



The total number of kilometres travelled for business purposes increased by 8.6 per cent compared with the previous year. There was an increase in the number of kilometres travelled both by air and by train, which is the form of transport with the lowest environmental impact. Private car use has gradually declined in the last five years.

FIGURE 17

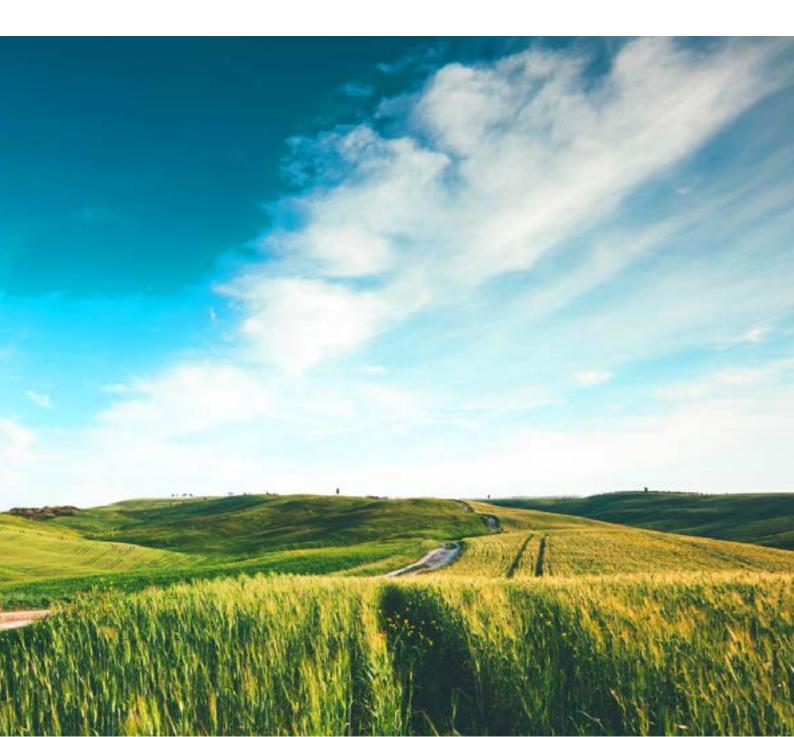
BUSINESS TRAVEL – BANK OF ITALYPercentage of Rome-Milan trips made by train





For the most frequently travelled route, between Rome and Milan, there has been a steady increase in travel by rail rather than by air (Figure 17). Since 2017, for journeys of under four hours only train travel is allowed on routes served by high-speed rail links.

+8.6% increase in km travelled compared with 2017



green procurement

The Bank is committed to reducing its ecological footprint, including by means of its green procurement policy, in order to help to guide the market towards developing more eco-sustainable goods and services.

Tender procedures comply with the minimum environmental standards issued by the Ministry for the Environment. Moreover, in its procurement tenders, the Bank: (a) requires possession of environmental certificates; (b) includes green contract-performance clauses; (c) requires ecological quality stamps for the items included in the tender; and (d) awards extra points for the greenest companies (in tenders favouring the most economically advantageous bids).

Suppliers are also encouraged to adopt best practices for workplace health and safety and social responsibility.

In addition to requiring the contractor to have obtained ISO 14001 certification, tenders for office cleaning services include clauses requiring:





green procurement

(a) cleaning products to have the Ecolabel environmental quality logo; and (b) technical solutions leading to reductions in water and electricity consumption. Numerous ecological clauses are included in the tender procedures for the staff canteen services.

In the tender procedures for building work and plant maintenance services for the Bank's premises extra points were awarded for: (a) possession of certificates for the environment (ISO 14001), energy efficiency (ISO 50001), workplace health and safety (OHSAS 18001 and ISO 45001) and social responsibility (SA8000); and (b) a commitment to increasing the efficiency of the technological systems and the building envelope. There were also green clauses in the tender for the Money and Finance Museum in Rome, including for the adoption of specific measures to mitigate the environmental impact of the works indicated in the Environmental Sustainability Plan.

Specific technical improvements in energy efficiency are required for purchases of IT equipment.



sustainable investment

The Bank values the environment and sustainability and this influences how it manages its investment portfolio.

In 2018, it decided to consider environmental, social and governance (ESG) factors when selecting equity investments, which amounted to €8 billion at the end of the year (securities of 146 listed companies), equal to 6 per cent of its financial portfolio).

Including ESG criteria in selecting issuers is based on two principles: (a) the exclusion of companies that operate mainly in sectors that do not respect the principles of the United Nations Global Compact (controversial activities in high-risk sectors such as the tobacco and nuclear sectors, and chemical or biological weapons); and (b) preference for companies with the best scores from an ESG perspective.

Overall, as a result of the criteria adopted, the environment indicators associated with the Bank's new equity portfolio have improved: total greenhouse gas emissions have fallen by about 23 per cent (0.76 million tonnes), energy consumption has been reduced by about 30 per cent (7.76 million gigajoules) and water consumption by about 17 per cent (6.95 cubic metres).

The Bank is committed to continuing in this direction with the aim of further improving the sustainability indicators for its own equity investments and of extending the ESG approach to managing other categories of financial investments such as corporate bonds for example.



environment-friendly culture

Analysis and research

The Bank contributes with analysis and research carried out by staff economists to the debate on environmental issues. The research work looks closely at the relationships between the economy, finance, energy and the environment. In October 2018, the Bank published a research paper entitled '*Natural catastrophes and bank lending: the case of flood risk in Italy'*, Questioni di economia e finanza (Occasional Papers), 457. The research analyses the relationship between bank lending and the risk of natural catastrophes, which is high given the morphological characteristics of Italy but is also increasing as a result of climate change. February 2019 saw the publication of the study '*The impact of carbon risk on stock returns: evidence from the European electric utilities*,' Journal of Sustainable Finance & Investment, which examined the effect of the carbon risk on yields of European energy utilities equities.

In May, the Governor took part in the Sustainable Development Festival 2019, giving a speech entitled 'Sustainable development and climate risks: the role of central banks'.

Conferences and workshops

The Bank organizes and hosts a number of conferences and workshops on energy and the environment: in September 2018 it organized the conference entitled, 'Le sfide in campo energetico per l'economia italiana e il funzionamento del mercato elettrico: decarbonizzazione, tutela dei consumatori, mercato' (Energy challenges for the Italian economy and the workings of the electricity market: decarbonization, consumer protection, and the market). Participants included representatives of the main energy companies (GSE, Unione Petrolifera, IEFE-Bocconi, RSE, ENEA, Terna, and Axpo). In December 2018, the Bank hosted a workshop with the leading experts on energy poverty. In June 2019, at ARERA, Bank of Italy researchers presented the first *Report of the Osservatorio italiano sulla*

povertà energetica - OIPE (Italian Energy Poverty Observatory - IPOV). In July 2019, there was a workshop entitled 'Sviluppo sostenibile, finanza e rischio climatico' (Sustainable development, finance and climate risk), with leading financial operators (including ABI, Assogestioni, Federcasse, Unicredit, Intesa Sanpaolo, UBI Banca, ICCREA, and Etica SGR) and representatives from academia.

National and international working groups

The Bank also plays an active part in drawing up national environment policies in that its own staff members participate in national and international committees. At national level the Bank helps to draft the *report on the national energy situation, 'La situazione energetica nazionale'*, prepared by the Ministry of Economic Development. It participates in the work of the *Comitato per la stima del capitale naturale (Italian Committee for the estimation of natural capital)* and of *the Osservatorio sulla finanza sostenibile (Observatory on Sustainable Finance)*, coordinated by the Ministry of the Environment. In 2018 the Bank coordinated work on a survey of leading Italian financial operators to assess the level of preparation of the sector for climate-related risks, and this was followed by the publication of a report.

It also helped to prepare the section of the Climate-Energy Plan dealing with energy poverty.

The Bank gives technical support to the Ministry of Economy and Finance in relation to the negotiations on legislative proposals arising from the *EU Commission's Action Plan on Sustainable Finance*.

At the international level, the Bank belongs to the Network for Greening the Financial System (NGFS), set up in 2017 by a number of the world's leading central banks and supervisory authorities. The network coordinates study projects and exchanges of experiences on environmental and climate risk management, acting as a catalyst for the transition towards a sustainable economy.

At the international level, the Bank's frequent participation in G20 working groups on sustainable energy and finance helps to identify problem areas linked to the risks that climate change poses to the economic and financial system, and the examination of the best ways to mitigate them.

Along with the supervisory authorities in other EU countries, the Bank of Italy will contribute to the achievement of the mandates assigned to the European Banking Authority to identify the risks that the factors of sustainability pose to the stability

environment-friendly culture



of the financial system. It will also participate in the analysis work scheduled, in the context of the Single Supervisory Mechanism, which included climate change in its map of the main sources of risk in 2019.

Lastly, the Bank is part of the Environmental Network of Central Banks (ENCB), an informal working group made up of representatives of 11 central banks, which promotes the exchange of best practices in the management of internal environmental aspects. In September 2018, one of the six-monthly meetings of the network was held at the Centro Donato Menichella.

Corporate volunteering

135
Participants in voluntary environmental projects

The Bank encourages and supports its staff's volunteering for social projects in favour of the most vulnerable parts of the population and to restore and protect the environment. From 2018 to the first half of 2019, seven staff volunteer projects were carried out together with Legambiente, to increase the use of public green space (in Rome and Milan) or along the coast (in Ancona and Palermo). Around 135 staff members volunteered.

Ecology and art

With the aim of supporting artists who combine their artistic projects with social commitment and attention to green issues, the Bank purchased some works by artists involved in the project 'L'ecologia dell'arte' (The ecology of art). These artists installed a mural in a school in Rome. They used an innovative kind of 'smogeating' paint that by means of a chemical process — photocatalysis — reduces pollutants and harmful pathogens.

Other initiatives

As part of the Bank's work experience programme for high school students, in 2018 a project was carried out with students on environmental issues. This project was repeated in 2019 both at the Bank's head office in Rome and at the Catania branch.

The 2019 edition of 'Bring your kids to work day' - which welcomes the children of employees to the office - was organized in collaboration with Legambiente. The children were involved in recreational and educational activities on the theme of respect for the environment and for the sea.



methodology

The data in this edition of the Environment Report are updated to 31 December 2018. The charts that refer to the 'Bank of Italy' show the data for all the buildings where the head office directorates and branch offices carry out their work (Figure 18). The remainder specify the building or activity to which they refer.

Staff employed by the Bank of Italy at 31 December 2018 numbered 6,689 (see *the Report on Operations and Activities*, available on the Bank's website), of whom 114 on secondment to other organizations in Italy and

176 abroad. Around 4,500 people work in the Rome and Frascati offices.

Reduction in the number of employees compared with the previous year

To calculate the environmental indicators per employee (per capita paper consumption, etc.), no account was taken of the presence on Bank premises, even on a continuous basis, of staff from outside suppliers or of Carabinieri police officers.

The environmental indicators were calculated according to national and international guidelines. In particular, reference was made to the guidelines on the implementation in banks of the GRI Global Reporting Initiative, version G4, published by ABI Lab (2018), based on the Greenhouse Gas (GHG) Protocol. The table below illustrates the correlations between the indicators required by the GRI accounting standard and the page numbers of this report where they appear.

GRI Standards		Page number
103-2	Management approach	6
301-1	Materials used by weight or volume	14-16
301-2	Recycled materials used	14-16
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302-4	Reduction of energy consumption	8-11
303-1	Total water drawn by source of supply	12-13
305-1	Direct emissions of greenhouse gas	4
305-2	Emissions of greenhouse gas generated by energy consumption	4
305-3	Other indirect emissions of greenhouse gases	4
305-5	Reduction in the emissions of greenhouse gases	4
306-2	Waste by category and type of disposal	18-21

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