

READY, SET, ACT

SEIZING OPPORTUNITIES THROUGH ENVIRONMENTAL ACTION IN ITALY



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FOREWORD: MAXFIELD WEISS

EXECUTIVE DIRECTOR, CDP EUROPE



Maxfield Weiss
Executive Director,
CDP Europe

CDP was founded more than two decades ago with the ambition to transform capital markets by making climate change reporting and risk management a business norm; the theory being what gets measured gets managed.

By 2021, CDP has worked with approximately 590 investors representing over US\$110 trillion in assets to pioneer environmental disclosure, greenhouse gas emissions reduction, water conservation, and forest protection for companies, representing over 50% of global market value. The focus has expanded from climate change into the interlinked environmental issues of water security and deforestation. Our target audiences have also expanded to incorporate cities, states and regions.

In August 2021, the IPCC scientists released their starkest warning yet, that we are at imminent risk of hitting 1.5 degrees in the near term. The only way to prevent exceeding this threshold is by urgently stepping up our efforts, and, pursuing the most ambitious path.

Through the Science Based Targets Initiative (SBTi) launched in 2015, CDP, together with its partners and the SBT network (SBTn), has been driving ambitious climate action by enabling companies to set science-based emissions reduction targets and now also supporting cities on their journey to set a science-based target. This is the first independently certifiable standard that asses a company's net-zero targets and more importantly, sets a clearly defined path to be aligned with the Paris Agreement's 1.5C. With many bold climate commitments made by companies at COP26, this initiative offers an opportunity for them to take action, reduce their emissions in line with climate science and lead the way to a low-carbon future.

Cities can also use methodologies endorsed by the SBTn to set science-based and equitable

emission reduction targets. COVID-19 has shown us that risks and vulnerability to the cities' residents are inextricably linked with cities' ability to take climate action. For cities to become resilient, healthy, and prosperous places to live and work, they must be on a pathway toward 1.5 degrees by setting and delivering against net zero targets. Reporting through the CDP platform allows for thorough assessment of these targets, benchmarking against peers and finding areas of opportunity. As part of its strategy, CDP will focus on driving science-based targets setting for cities and regions in Europe.

CDP is grateful for the long withstanding collaboration with the Italian Ministry for Ecological Transition, and its efforts to drive disclosure and climate action in Italy. Our collaboration is a recognition that voluntary activities by non-state actors play a crucial role in global efforts to reduce emissions and protect natural resources. Italian companies, cities and regions are key to the low carbon transition both at the national and European levels. The number of cities, regions and companies that have disclosed data on climate change, water and/or forests has doubled since 2017 which proves once more Italy's commitment towards a greener economy.

CDP will continue to drive disclosure and action among Italian companies, cities and regions, and will assess their progress in implementing set climate targets and actions. A comparison with the indicators presented in the global stocktake tool will help measure Italy's non-Party stakeholders' contributions to the implementation of the Paris Agreement.

FOREWORD: ROBERTO CINGOLANI

MINISTRY OF ECOLOGICAL TRANSITION, REPUBLIC OF ITALY



Republic of Italy

Host COP26, host of the pre-COP and Youth Summit and of the G20 Summit, Italy has put climate and environmental action high on the agenda of world leaders and civil society in 2021. The completion of the Paris Rulebook is only one of the many successes celebrated last year. Most of all, drawing attention to youth voices on the climate and environmental crisis and the urgent need for action, has been at the heart of the work of the Italian Ministry for Ecological Transition.

Yet there is still much work to be done. This will be a decisive decade for tackling the climate crisis while at the same time dealing with the impacts of the global pandemic. Nationally determined contributions (NDCs) pledged at COP26 still fall far short of what is needed to limit warming to 1.5°C. Preparing for the Global Stocktake process is therefore very important, to show the gap between pledges and follow-throughs by countries.

Two years into the corona virus pandemic, the Italian people and economy, as the rest of the world, have faced unprecedented challenges. One aspect has been made clear early on in dealing with this health crisis: we cannot lose sight of the perils of climate change. Supporting a green recovery and tackling the climate crisis and nature loss have been shown by Italy in many initiatives during the last year. Italy's plans for an economic recovery, outlined in the recovery and resilience plan approved by the European Commission, allocates at least 37% of funds towards climate spending to facilitate a green economic recovery.

Italy will work closely with the French Council presidency and the German G7 presidency to keep the climate issue on the international agenda. With a finalized Paris Rulebook, the world community now has a framework at hand to move towards fully implementing the Paris Agreement and achieving the 1.5°C target. Whilst some aspects, such as Article 6, still need to be worked out, efforts to accelerate climate and environmental action to achieve the Paris Agreement goals are taking shape now.

The next years will be crucial to stay on track to keep the temperature increase within 1,5°. To reach this objective we are called to an epochal change, and the Ministry of Ecological Transition is committed to drive action on the

ground among companies, cities and regions, with the aim of facilitating Italy's transition to a sustainable low-carbon economy. Monitoring and assessment of risks and actions are key elements in ensuring that we will continue to move in the right direction.

That is why the Ministry is collaborating with CDP, to drive action on the ground among companies, cities and regions in Italy, and the inclusion of non-Party stakeholder contributions in the Global Stocktake efforts.

The Ministry encourages companies to publicly provide environmental information to their stakeholders to enable them to evaluate the possible related impacts of their investments and purchasing decisions. Shifting capital is key for the transition and disclosure information not only provides valuable, relevant and material information, but also increases market transparency on environmental risks and opportunities.

Going beyond disclosure and accelerating climate action, the Ministry supports companies, cities and regions in committing to set ambitious science-based targets to reduce their emissions. By setting a net-zero target in line with a 1.5°C future, companies, cities and regions can make their critical and necessary contribution to limit the worst impacts of climate change.

THE MINISTRY OF ECOLOGICAL TRANSITION AND CDP EUROPE

The Ministry of Ecological Transition and CDP have a longstanding collaboration to drive voluntary climate and environmental action among companies, cities and regions in Italy. A formal cooperation was formed through a Memorandum of Understanding in 2017. Since then, the Ministry and CDP have been driving transparency on a national level and on the international stage towards achieving the Marrakech Partnership for Global Climate Action, aligning the Italian government's contributions to implement the Paris Agreement, its Nationally Determined Contributions (NDCs), and its contributions to the Sustainable Development Goals (SDGs).



Disclosures by companies

148 370

has increased significantly from 148 companies in 2018 to over 370 companies in 2021. Cities and regions disclosure was strongly impacted by the covid health pandemic in Italy, yet it is showing signs of recovery.

In December 2020, the Ministry and CDP, under the third Programme of Work, are shifting the collaboration from engagement towards data insights. CDP is developing new and furthering existing CDP methodologies to assess the ambition level of corporate, city and regional climate and environmental commitments, and measure Italy's contribution through the Global Stocktake. In November 2023, the Italian government must demonstrate progress towards its climate targets as part of its commitments to the Paris Agreement. Non-Party stakeholders, while not officially part of the UNFCCC process, are recognized through the Marrakech Partnership and the Decision of the Paris Agreement. They play a crucial role in achieving the goals of the Paris Agreement. Thus, measuring Italy's contributions to the Global Stocktake may include the contributions of Italy's non-Party stakeholders.

The Global Stocktake and the role of non-Party stakeholders

With the Paris Rulebook concluded at COP26, attention is shifting towards the preparation of the Global Stocktake. Over the course of 2022 and 2023, the UNFCCC and its subsidiary bodies will seek to collect information, prepare a technical assessment of the information and outputs for a first Global Stocktake by COP28 in November 2023¹.

CDP is supporting the inclusion of non-Party stakeholders in the Global Stocktake, to inform countries and the international community about the ambition level and progress made of contributions by these stakeholders. CDP has been a provider of data and insights into action of non-Party stakeholders to the UNFCCC for years, and a data provider and partner to the Global Climate Action Portal.

To ensure a robust and impactful framework for a Global Stocktake, which will enable an increase in ambition by all Parties to the UNFCCC to reach the goals of the Paris Agreement, CDP recommends the three following principles:



■ **Purpose-driven:** The Global Stocktake should be driven by the need to accelerate global ambition and the implementation of the Paris Rulebook.



■ Inclusive: The Global Stocktake should be inclusive, fostering participation and engagement from all parties as well as non-Party stakeholders.



▼ Evidence-focused: High quality data should be front and centre of the Global Stocktake process.

Please see here for more details on CDP's recommendations for a Global Stocktake.

THE MINISTRY OF ECOLOGICAL TRANSITION AND CDP EUROPE

A stocktake of Italian non-Party stakeholder data

The development of a stocktake for Italy is based on CDP data, reported by companies, cities and regions in Italy. As a first phase in the project, CDP looked at the **ambition level of Italian companies**. The analysis is based on a previous policy briefing which provides a comprehensive **temperature rating analysis** for Italy (CDP, 2021)². The analysis used reduction targets and emission reduction trends reported by 194 Italian companies in 2020. For the purpose of this report, relevant key findings are selected, and complementary analyses are performed based on the given analysis sample.

Mitigation ambition: Italian companies

For this assessment, EU NDC is applied which foresees a reduction of

55% between 1990 and 2030 (incl. LULUCF).

Companies' ambitions are measured against two benchmarks. First, the goal of limiting global temperature rise to **1.5°C**, reflecting the Paris Agreement and second, reduction rates entailed in the Nationally Determined Contribution (NDC). For this assessment the EU NDC is applied which foresees a reduction of **55% between 1990 and 2030** (incl. Land Use, Land Use Change and Forestry(LULUCF)). As of now, Italy has not set an economy-wide emission reduction target.

The key figure to indicate Italy's corporate climate goal alignment is the percentage of emissions in the sample that is attached to those goals. The analysis focuses on scope 1 and 2 emissions only. Scope 3 target - and emissions reporting is still quite insufficient in terms of sample coverage and disclosure quality³. It is encouraging though to observe scope 3 reporting improvements in newly set targets, leveraging the scope for future analyses⁴.

Box A shows the share of scope 1 and scope 2 emissions in the sample that is aligned with the **global 1.5°C goal**. This share relates to emissions reported by companies which hold 1.5°C aligned emission reduction targets or pathways. The result indicates that **46% of scope 1 and 2 emissions** are aligned with the 1.5°C goal.

Figure 1. Alignment score of Italian companies (scope 1 and 2 emissions)

Box B shows the share of emissions in the sample aligned with the **EU NDC** and its implied linear annual reduction rate. According to Italy's GHG inventory, total emissions were reduced by 23,6% between 1990 and 2018⁵. Based on the EU NDC, a reduction of 31,4% remains until 2030. This corresponds to a linear annual reduction rate of 2.6%. It shows that **49% of scope 1 and 2** emissions are attached to companies with targets or emission pathways with a reduction rate equal or higher than those 2.6%.

Box A: 1.5° Goal

UNFCCC
Paris Agreement
46%
Emissions aligned with 1.5°C (Scope 1 and 2)

Box B: EU NDC

EU NDC 55%

Achieved:

23.6% Reduction remaining 2.6% p.a.

49%

Emissions aligned with NDC reduction rate (Scope 1 and 2)

The key figures highlighted in figure 1 indicate the *share* of aligned emissions, not the number of companies as such. It is noteworthy that total emissions are dominated by a few very large companies in the sample. For instance, the three companies Enel SpA, Eni SpA and Cementir Holding make up 80% of emissions in the sample of disclosing companies, while all others make up 20% together.

THE MINISTRY OF ECOLOGICAL TRANSITION AND CDP EUROPE

Industry Analysis

92 companies

are classified as manufacturing and only make up **6%** of total scope 1 and 2 emissions Figure 2 shows the **prevalence of industries** in the sample, both in terms of the number of companies as well as the share of their emissions⁶. It shows that by far most companies are classified as manufacturing (92 companies). Yet, those companies only make up a small fraction of total scope 1 and 2 emissions (approx. 6%). In contrast, relatively few companies in infrastructure or fossil fuels (18 and six companies respectively) make up a major fraction of emissions in the sample (approx. 60% and 26% respectively).

Figure 2 further highlights the **share of 1.5° aligned emissions within each industry**. Overall, the binary assessment of temperature scores (i.e., 1.5° C yes or no) leaves many industries with alignment shares of $0\%^{7}$. Yet, some industries stay out. In the infrastructure industry 82% of emission are 1.5° C aligned, while apparel scores 50,7% or services 23,4%.

However, those results should be interpreted with caution and awareness to the fact that few very large companies drive those percentages. For example, in the infrastructure industry only Enel SpA obtains the 1.5°C-aligned temperature score which make up the major fraction of emissions in this industry sample and thus raises up the total alignment share to 82,8%.



Figure 2. Industry assessment of 1.5°C alignment

Outlook

There has been a considerable rise in 1.5°C aligned, science-based targets of Italian companies as detailed findings in the *Infobox SBTi* and *Net Zero* (see section "Corporate disclosure and action in Italy") unfold. This constitutes an optimistic outlook of future analyses regarding Italian companies' mitigation ambitions.

Beyond mitigation, future analyses aim to complement the present findings towards a holistic stocktaking assessment. This includes a consideration of nature, while also taking into account de facto achievements beyond mere ambitions. Also, future analysis entails incorporating cities and regions' mitigation and adaptation ambitions, and progress thereof.

OVERVIEW:

COMPANIES, CITIES AND REGIONS DISCLOSURE IN ITALY

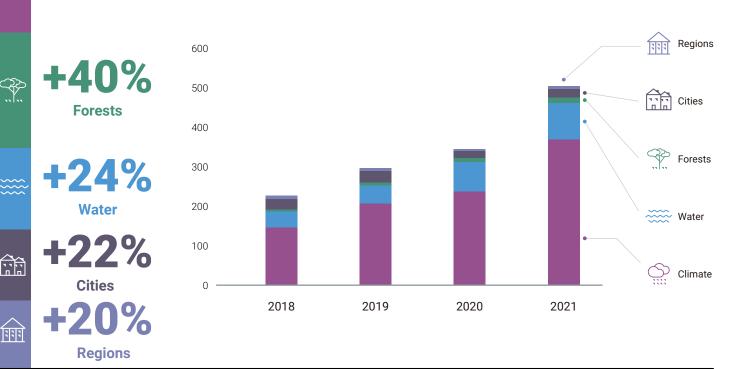
Increase in disclosures from 2020 to 2021, by questionnaire

+55%
Climate Change

Disclosures in Italy have seen a stark rise over the last years for companies. In total, over 370 out of over 630 requested companies disclosed through the CDP platform in 2021. 370 of these companies disclosed on climate change, which is a 55% increase to the previous year. On water security and forests, over 90 companies for water and 14 companies on forests disclosed, which is a 24% and 40% rise respectively. Overall, companies' disclosure from 2020 to 2021 has increased by 42%.

Disclosure from cities has also increased in 2021 compared to the previous year. 23 cities and 6 regions disclosed to CDP over the course of 2021. Thus, city disclosure increased from 18 to 23 compared to 2020, after numbers fell from 28 to 19 in the year before. The number of disclosing regions stayed relatively stable over the past years but increased from five to six from 2020 to 2021.

Figure 3. Disclosure numbers over time, by questionnaire8



KEY RECOMMENDATIONS



AIM: ITALY SHOULD ADVANCE A COMPREHENSIVE EVIDENCE DATABASE AND SCIENCE-BASED EMISSION REDUCTIONS TARGETS IN LINE WITH THE PARIS AGREEMENT.

Ambitious climate and environmental action will be vital for Italy to achieve both its national goals and the European climate and environmental targets. Internationally, Italy's leadership is also of the highest importance in driving climate and environmental ambition, as well as science-based, timebound, and measurable targets within the UNFCCC and the Convention on Biological Diversity (CBD).

In light of the decade of action and the Global Stocktake preparations, all Party and non-Party stakeholders need to increase not only their commitments, but their actions significantly. Data is critical to measure and assess climate and environmental commitments, ambition levels, and progress made against these commitments. Thus disclosure remains the fundamental basis for non-Party stakeholders when taking urgent action on the climate and nature recovery.



KEY RECOMMENDATIONS

Corporate disclosure increased over The disclosing companies in 2021 represent of market capitalization in Italy In 2021, companies and received an A score

Q

FOCUS: TO ACHIEVE THIS AIM ITALY SHOULD FOCUS ON ADDRESSING ISSUES IN RELATION TO THE QUANTITY OF AVAILABLE DATA AND THE QUALITY OF DISCLOSURE AND ACTIONS.

Quantity of available data:

A continued increase in the number of Italian organisations disclosing on climate and the environment will be necessary to build the foundation for a comprehensive evidence base for economy-wide analyses

- Driven by the government's endorsement and CDP investor and supply chain authorities, corporate disclosure increased over 40% in 2021 (from 263 to 373 companies, 2020 to 2021).
- The disclosing companies in 2021 represent 74% of market capitalization in Italy.
- Yet nearly half of requested companies are still not disclosing.

- And some notable holdouts remain in the high impact sectors (e.g. Buzzi Unicem).
- Cities and regions disclosure is significantly lower than corporate disclosure in 2021, yet with the collaboration of the Ministry for Ecological Transition and CDP, disclosure increased to over 30 cities and regions disclosed through the CDP-ICLEI Unified Reporting System.

High importance: Ambition in reporting and action

To meet the goals outlined in the Paris Agreement, Italian organisations will need to increase the ambition of their climate and environmental goals and reporting. foundation for a comprehensive evidence base for economy-wide analyses

- While a substantial increase in disclosing organizations was achieved in 2021, companies, cities and regions still need to improve on the completeness of their disclosures. This means filling out all relevant CDP methodologies and data points in the CDP questionnaire(s).
- In 2021, only six companies and two cities received an A score. This indicates that both more reporting completeness and

- higher environmental ambition are needed.
- Not all companies, cities and regions are disclosing their information publicly, so that governments, citizens and other stakeholders can gain insights from the disclosures. Therefore, there is a strong need to increase the availability of public climate data on corporates', cities' and regions' climate impacts, governance and actions.

CDP is grateful for the <u>endorsement</u> of CDP's disclosure system and the long-standing collaboration with the Ministry for Ecological Transition to drive the above topics. In 2022, we aim to collaboratively promote and strengthen climate and environmental action in Italy.

KEY RECOMMENDATIONS



ACTION: ITALY SHOULD CONSIDER THE FOLLOWING ACTIONS TO ADDRESS THESE ISSUES

Quantity of available data:

Promote disclosure among companies, cities and regions

- In 2022, more Italian cities and regions should disclose their environmental impacts through the CDP-ICLEI Unified Reporting System. Already disclosing cities and regions need to increase their actions taken, to allow for a high level of transparency to the national government, citizens and other stakeholders.
- In 2022, more companies should disclose publicly, especially companies requested to disclose on water and forest.

High importance: Ambition in reporting and action

Encourage Italian companies and cities to set SBTs, to improve on scope 3 and supply chain impacts as well as act on resilience and nature recovery. With the ongoing endorsement and collaboration with the Ministry for Ecological Transition, the before mentioned topics can be highlighted and strengthened.

Science-based targets: Science-based emission reduction targets need to become mainstream for an economy-wide netzero transition. Italian companies should set science-based mid-term emission reduction targets and net-zero long-term targets in accordance with the Science-based Targets initiative (SBTi) and the new net-zero standard. More Italian companies need to take immediate action to set a science-based mid-term target and start the process towards setting long-term net-zero targets.

Cities can, through the methodologies endorsed by the Science-based Targets Network (SBTn), set science-based and equitable emission reduction targets. This is crucial to reach the level of ambition needed to address the climate crisis, thus

needed to address the climate crisis, thus cities should review their current targets and start the process towards setting science-based targets.

- Scope 3 and supply chain impacts: Companies, cities and regions should improve their scope 3 assessments and implement measures to reduce impacts
- Adaptation and resilience: Adaptation measures will become more important in Italy, as climate and environmental impacts, such as extreme heat, become increasingly frequent. Cities and regions need to take action and build resilience. CDP urges all

and build resilience in their supply chains.

- Italian cities, provinces and regions to join the UN-backed global campaign: Race to Resilience. To support ambitious action, the CDP Matchmaker platform, a global CDP initiative, can help cities connect with institutional investors and international public finance institutions.
- Nature: Nature positivity is an emerging and important topic. Companies should **take** action on water, forest and biodiversity related issues in their operations and in their global supply chains.
- Collaboration: Companies, cities and regions should seize collaboration opportunities, to make use of benefits of collective actions, knowledge exchange, capacity building and finance opportunities. National, regional and citylevel collaboration is a powerful force for change in the climate crisis and creates positive momentum. More than a quarter of disclosing cities globally, and 10 out of the 23 of the disclosing cities in Italy say reaching their emissions reduction targets also relies on policy outside their control.
- Showcase ambition and leadership:

Organisations should showcase their ambition and actions to the wider European audience by pledging commitments through the European Climate Pact. This enables collaboration at scale by connecting companies, cities, and regions together with citizens to make shared pledges.

More than

25%

of the disclosing cities globally, and **10** out of the **23** of the disclosing cities in Italy say reaching their emissions reduction targets also relies on policy outside their control

CITIES AND REGIONS DISCLOSURE OVERVIEW



CDP-ICLEI Unified Reporting System

Since 2019 CDP and ICLEI (ICLEI – Local Governments for Sustainability) are using the Unified Reporting System to simplify the process for local governments to report their environmental data¹⁰. Thus, cities can take advantage of one single platform to which they can at once report to multiple local and regional networks¹¹ including the Global Covenant of Mayors, C40, ICLEI, RegionsAdapt Initiative, and the WWF One Planet City Challenge. Reporting to one unified platform creates a centralized hub for information to support improving local governments' governance structures and to better understand the opportunities available to them. Furthermore, the unified platform provides vital information for investors and improves confidence in future investment decisions.

In 2021, Italy reached the highest number of disclosing cities and regions among all European countries using the CDP-ICLEI Unified Reporting System and the CDP questionnaires. The benefits that cities and regions can reap when disclosing are manyfold, and disclosing every year helps them to, monitor climatic and environmental risks over time, take the necessary adaptation and mitigation actions, and understand their impacts. Compared to the first year of the Covid-19 pandemic, in 2021 six more Italian cities and one more Italian region reported to the questionnaire, showing that Italian cities and regions continue to commit to transparency, and even new cities and regions join this process despite the global pandemic.

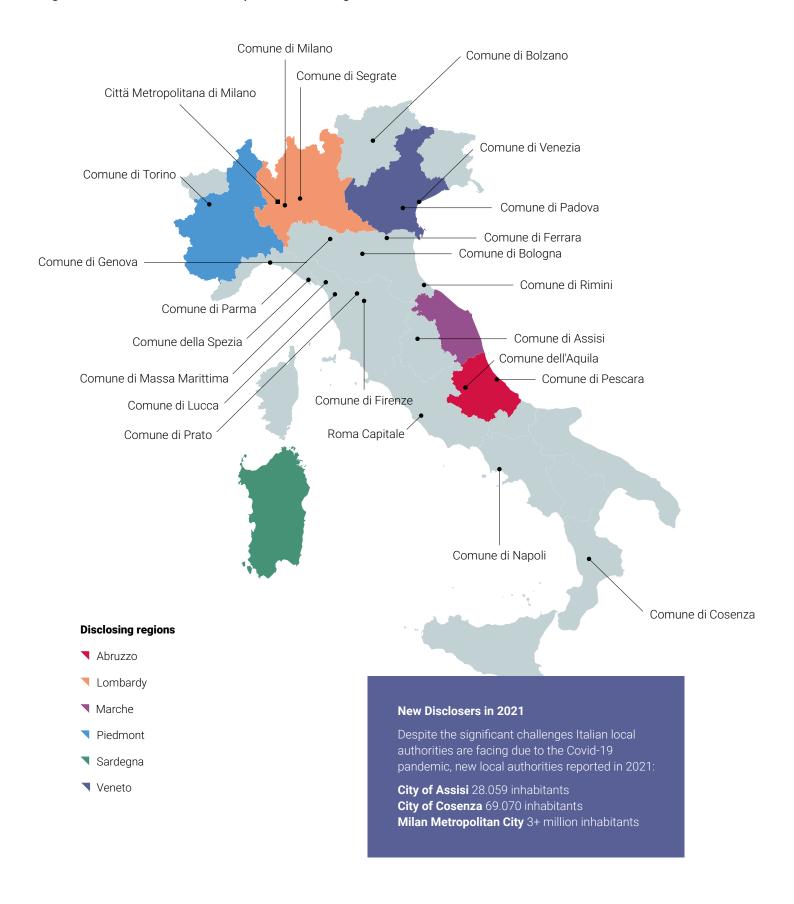
As in the previous years, it shows that both the Centre and North of Italy are better represented among disclosing Italian municipalities

and regions. An analysis of the type of cities engaged also shows that most responding cities are of medium to large size. Nevertheless, three exceptions of smaller cities under 50,000 inhabitants (Assisi, Massa Marittima and Segrate) show that also smaller local authorities are recognizing the importance of allocating time and resources to build climate readiness.

Additionally, to date over 100 Italian cities and regions (of all sizes and being located all across Italy) declared a climate emergency, demonstrating their understanding of the importance to address climate change risks and impacts¹². Now is the time to put in place the plans and actions necessary to turn that ambition into reality. Italian local authorities, through close engagement with their communities and influence over planning and transport, will in fact be critical to achieving significant results in the coming years.

CITIES AND REGIONS DISCLOSURE OVERVIEW

Figure 4. 2021 disclosure map for Italian regions and cities



INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

In 2021,

cities around the world received an A score from CDP

48% of the 95 cities showed to be new additions compared to the previous year's A listers

Cities and regions performance: Italian A List Cities

CDP believes that ambitious cities can offer clear best-practice examples of how to drive climate innovation, influencing the weight and urgency national governments give to the crucial goals of reducing emissions and building resilience¹³. In 2021, 95 cities around the world received an A score from CDP¹⁴, and 48% of them showed to be new additions compared to the previous year's A listers. To achieve an A score, cities need to:

- disclose publicly;
- have a city-wide emissions inventory;
- set an ambitious emissions reduction target and a renewable energy target for the future;
- have a climate action plan published; and
- Nave a complete climate risk and vulnerability assessment and a climate adaptation plan to demonstrate how to tackle their climate hazards.

Italy followed the global trend of increased climate action by cities, with one new city, the City of Padova, achieving a place in the A List this year. This results in two cities, the City of

Florence and City of Padova, celebrating an A score in 2021 and displaying their leadership on environmental reporting and climate action.





INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Climate action providing opportunities and co-benefits to cities and regions

The transition towards a net-zero carbon and nature positive approach can offer opportunities for cities to push for a positive change for the planet, people and local economies. Through CDP's disclosure system, cities identify and report on those arising opportunities.

Figure 5 shows the top three opportunities reported by Italian cities from addressing climate change. 14 cities foresee the development of the sustainable transport sector as an opportunity while 10 cities name energy efficiency measures and technologies. Nine cities see an opportunity in strengthening resilience.

- Turin is favouring the local clean energy production, optimizing building characteristics for the energy consumption reduction, and building energy regulation systems.
- The new Bologna Metropolitan Sustainable Mobility Plan (PUMS) set important goals and actions related to increase resilience of mobility and infrastructure.
- Prato is taking up opportunities to develop climate change resiliency projects, analyzing vegetation types and tree species present in the municipal area, and proposing strategies for Urban Forestation
- In Ferrara, the municipality offices set up a team seizing funding opportunities through European projects.

Figure 5. Most prominent climate change opportunities named by Italian cities



The report "Co-benefits of Climate Action" shows that cities and regions around the world can gain multiple additional benefits from taking climate action, including job creation, cleaner air, and improved public health¹⁵.

Italian cities have specified co-benefit areas for 136 adaptation actions in their 2021 disclosure. For instance, nine cities report receiving benefits from creating flood defences, such as **increased resilience**, enhanced climate change adaptation and disaster risk reduction, among other benefits. Tree planting and/or the creation of green space is reported to support **ecosystem preservation** and **biodiversity improvement**, as well as greening the economy and reduced GHG emissions. Air quality initiatives implemented in cities, not only protect the citizens from dangerous atmospheric CO₂ concentrations, but also improve the **public health** and **preserve** the diversity of **ecosystems**.

Six out of 18 cities with a published or an in-progress adaptation plan reported having **assessed the synergies**, **trade-offs**, **and co-benefits** of their main mitigation and adaptation actions identified.

A total of 67 of the implemented mitigation actions reported by Italian cities were found to also lead to co-benefits. Energy efficiency and retrofit measures also enhance **resilience**, improve resource efficiency (e.g. food, water, energy) and help **reducing poverty**, while reducing GHG emissions. The generation of low or zero carbon energy supply generation brings **economic growth**, contributes to greening the economy, and creates **new jobs**. Driving zero emissions mobility helps improve the access to and **quality of mobility service**s and infrastructure while helping drive more sustainable behaviour in the population.

INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

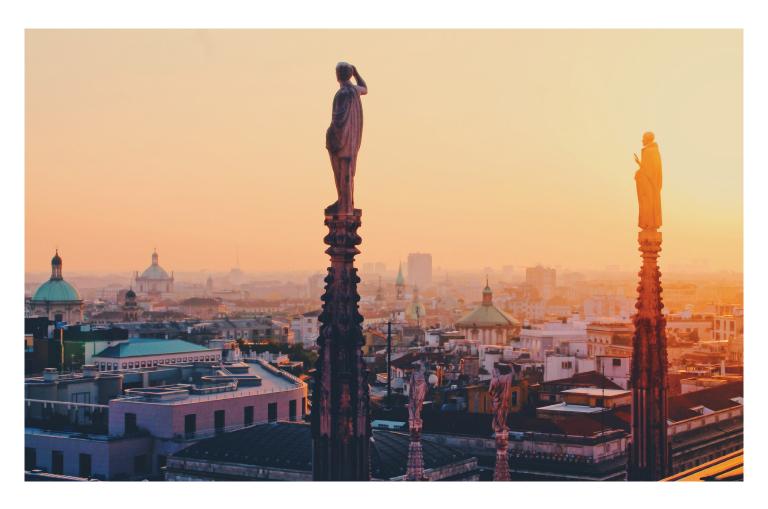
Cities and regions adaptation actions: adapting in the face of growing climate hazards

In the summer of 2021, Italy suffered an extended heatwave, reporting

48.8°C in the town of Floridia, near Siracusa in Sicily

People around the world are already facing devastating effects of extreme weather events and a changing climate, and Italy is no exception. Even under a 1.5°C global temperature pathway scenario, climate change impacts are inevitable. Adaptation and resilience are thus two very essential concepts. Closing the adaptation gap and responding to climate impacts is an imperative, while action and progress must be constantly tracked. Action to address the consequences of climate change and to build resilience needs to be taken urgently. Loss and damage, recognized in the Paris Agreement as result of failed mitigation and adaptation measures, needs to be avoided.¹⁶

Italian local authorities are facing severe impacts of climate-related hazards that are increasing in both frequency and magnitude. In the summer of 2021, Italy suffered an extended heatwave, with the town of Floridia, near Siracusa in Sicily, reporting 48,8°C on August 11, 2021 - an all-time temperature record in Europe¹⁷. Another worrying Europe-wide record was reported near Savona on October 4th 2021 in the town of Rossiglione, where 740,6mm of rain fell within 12 hours. This 12-hour amount of rain constitutes more than half of the normal amount in the region for an entire year¹⁸. Furthermore, Italy was hit by severe floods and waterspouts, which followed long droughts, heatwaves, and deficient precipitations ¹⁹.



INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Risk and vulnerability assessments

Cities' 2021 disclosure data shows that, 16 Italian cities have a climate change risk and vulnerability assessments in place, while four have such plans in progress and two more cities plan an assessment in the next two years. Key risks recorded in the assessments are extreme precipitations such as rainstorms, extreme hot temperatures leading to extreme heat waves, and flood and sea level rise leading to river floods.

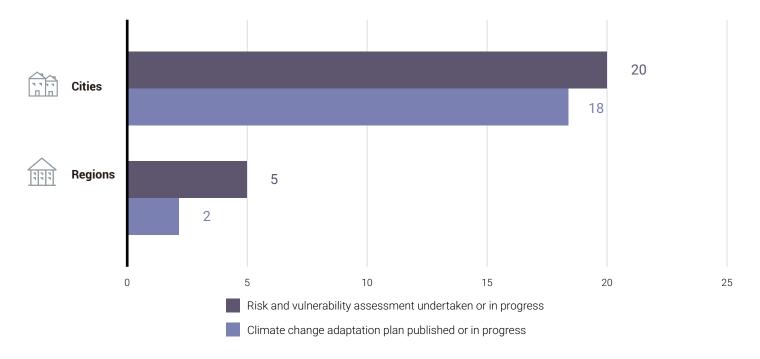
Additional to the cities, two Italian regions, Marche and Sardinia, report already having undertaken a climate change risk or vulnerability assessment, three further regions have such plans in progress (Abruzzo, Piemonte, Lombardia), while Veneto intends to undertake it in the next two years.

Adaptation plans

11 cities have an adaptation and/or resilience plan in place, while seven cities have this in progress. Further, four cities intend to develop such plans in the next two years. Compared to 2020, the presence of adaptation planning increased by 14%. However, Italian cities on average fall behind the pace of European cities.

In EU27 countries 74% of cities already have an adaptation plan in place, compared to only 48% in Italy. On the other hand, 30% of the Italian cities have such plans in progress, indicating Italian cities are increasingly taking action. Furthermore, Italian regions lack behind in adaptation planning, with four regions (66%) still not reporting to have any, while 48% of the European regions report having one in place already.

Figure 6. State of Italian authorities' vulnerability assessment and adaptation plan

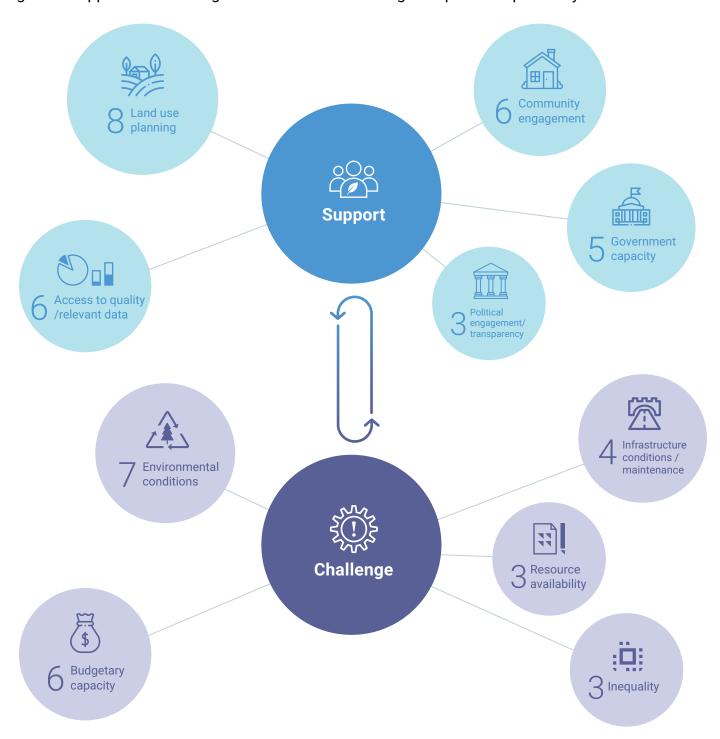


INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

There are two dimensions to a city's successful adaptation. First, there are support factors -specific attributes that increase the likelihood of successful adaptation. Second, there are challenge factors - attributes creating more difficulties towards successful implementation of adaptation measures. The 22 Italian cities reporting on these factors, disclose 15 support and 25 challenge factors influencing their ability to adapt successfully. The top five factors mostly recognized by cities as supporting factors in the face of climate change are land

use planning (named by eight cities), access to quality data (six cities), community engagement (six cities), government capacity (five cities) and finally political transparency (three cities). When identifying the challenging factors that most greatly affect the city's ability to adapt, the top five factors stated by cities are environmental conditions (named by seven cities), budgetary capacities (six cities), infrastructure conditions/maintenance (four cities), inequality (three cities), and resources availability (three cities).

Figure 7. Support and challenge factors of climate change adaptation reported by Italian cities



INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

44%

of the abovementioned actions are already in an implementation phase or in operation, while **9%** are in an monitoring and reporting phase.



A previous CDP analysis shows that cities with a vulnerability assessment are **more than twice** as likely to report long-term hazards, and are taking almost **six times more** adaptation actions, compared to those cities with no vulnerability assessment.

Adaptation actions

20 Italian cities report their main adaptation actions to reduce climate risks and vulnerability of their infrastructure, services, businesses and citizens. The following summarizes the key adaptation actions reported by those cities:

- ▼ Flood defences development and operation & storage (nine cities)
- Tree planting and/or creation of green space (eight cities)
- Crisis management including warning and evacuation systems (seven cities)
- Real time risk monitoring (seven cities)
- ▼ Flood mapping (six cities)
- Incorporating climate change into longterm planning documents (six cities)

It shows that 44% of the abovementioned actions are already in an implementation phase or in operation, while 9% are in an monitoring and reporting phase. Another noteworthy insight is that cities increasingly cooperate or partner with other entities in taking action.

■ Together with other 16 partners, Naples participated in the Clarity Project funded by Horizon 2020, acquiring tools to shape future actions in order to reduce climate change impacts, while also developing an integrated Climate Services Information System (CSIS) for resilience assessment and climate-proofing of large-scale infrastructure projects. The maps included into the Clarity Project were then improved thanks to the partnership between the University of Naples "Federico II" and the municipality.

- **Bozen** implemented a Green Roof Project in cooperation with a local research institute, to promote green roofs in its production area, resulting in better ecosystem preservation and biodiversity improvement, an enhanced resilience and contributing to create green jobs.
- Genova worked together with the Civil Protection on the crisis management, including early warning messages and evacuation systems for its inhabitants.

The key adaptation actions reported by Italian regions are:

- Community engagement/education (three regions)
- Incorporating climate change into longterm planning documents, landslide risk mapping, biodiversity monitoring (two regions)

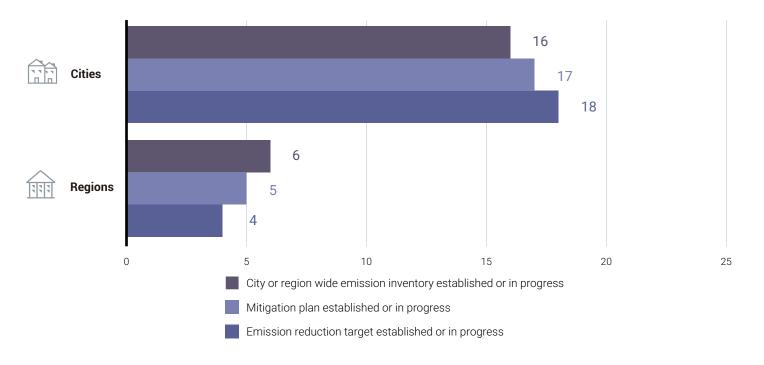
CDP urges all Italian cities, provinces and regions to join the UN-backed global campaign: Race to Resilience²⁰. A previous CDP analysis shows that cities with a vulnerability assessment are more than twice as likely to report long-term hazards, and are taking almost six times more adaptation actions, compared to those cities with no vulnerability assessment²¹.

INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Cities and regions mitigation actions: towards setting ambitious climate targets

The IPCC report "Mitigation pathways compatible with 1.5°C in the context of sustainable development" shows that limiting warming to the 1.5°C goal of the Paris Agreement requires achieving global net zero CO_2 emissions by mid-century²². It is therefore key that mitigation action is taken immediately and effectively. Figure 8 shows the performance of cities and regions on three key steps towards impactful mitigation- and climate action: implementing a city/region-wide emission inventory, setting up a mitigation action plan and formulating meaningful emission reduction targets.

Figure 8. Italian cities and regions plan overview pathways to emissions reduction and mitigation of impact





INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Emission inventory

Monitoring and tracking emissions through an emissions inventory is essential to make informed decisions, set ambitious and realistic targets and engage stakeholders in action plans to meet the objectives set forth. In 2021, 15 Italian cities report an established city-wide emission inventory, while one city has such inventory in progress. Five cities intend to develop their inventory within the next two years. Among the 15 cities having a city-wide emission inventory, 11 register only CO_2 , while one city also takes into account CH_4 and CO_2 . Three cities -Florence, Milan and Rome- take a step further and consider CH_4 , CO_2 and N20. All six reporting regions have a region-wide emission inventory in place.

Mitigation plan

A mitigation plan helps cities and regions to understand, plan and implement actions and monitor their progress. 15 cities have a mitigation plan in place, while two have one in progress or intend to develop a plan within the next two years respectively. Three regions already have a mitigation plan for reducing region wide GHG emissions in place, while two regions are progressing on developing a plan and one intends to undertake the development of such a plan within the next two years.

■ Absolute target:

the commitment to reduce or control the increase of emissions by a specified quantity relative to the base year that the local government decided.

▼ Fixed-level target:

the local authority decides to reduce or control the increase of emissions to an absolute emissions level in a target year. Carbon neutrality is one example of it.

■ Baseline scenario target:

choosing to reduce the emissions by a specified quantity relative to a projected emissions baseline

■ Base year intensity target:

choosing to reduce the emissions intensity (emissions per unit of another variable, typically GDP or per capita) by a specified quantity relative to a base year²³.

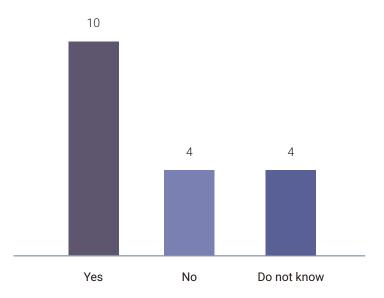
Representation 1 Emissions reduction targets

18 Italian cities report having set emission reduction targets.

All cities set absolute emission reduction targets, with one city setting an additional fixed level target. For instance, by 2050 Milan and Florence intend to reach 100% and 80% reduction of the emission sources included in the city-wide inventory, compared to their 2005 base year. Four cities do not disclose any emission reduction target. Three regions have set emission reduction targets, using different methods for target setting (baseline scenario target, base year intensity target and base year emissions target).

Mitigation targets should align with 1.5°C pathways, thus CDP urges all Italian cities and regions to join the UN-backed global campaign: Race to Zero and set a science-based climate target²⁴. When striving to set ambitious reduction targets, collaboration across levels of government is essential. Figure 9 shows that 10 out of 18 cities with emission reduction targets in place report that the progress of their targets is conditional on external factors or policy components outside of their control.

Figure 9. Number of cities reporting that achieving their emission reduction targets is conditional to the success of an externality or component of policy outside of their control



NSIGHTS FROM CITIES AND REGIONS DISCLOSURES

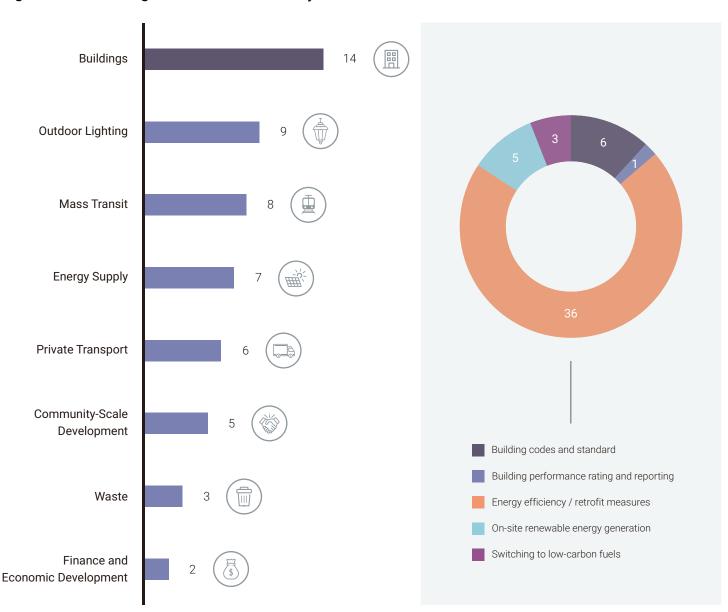
A Renewable energy target

Nine Italian cities, accounting for 39% of disclosing cities, have already set renewable energy targets, while 34% have such targets in progress and 8% intent to set such a target within the next two years. Italian cities are below the Europe average of 74% European cities disclosing to have renewable energy targets in place. Of the six disclosing regions, four regions have a renewable electricity or energy target in place.

Mitigation actions

16 Italian cities report overall 129 mitigation actions. Figure 10 shows the number of cities reporting the different action areas. Most cities report actions in the areas of buildings, mainly related to energy efficiency and retrofit measures. Yet, Italian cities further report actions related to outdoor lightings, mass transit, energy supply, private transport, community scale development, waste or financial and economic development.

Figure 10. Core mitigation actions named by Italian cities



INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Table 1. Core mitigation actions named by Italian cities

City	Climate Change Mitigation / Energy Access Plan	GHG Emissions Reduction Target(s) in place	Renewable Energy Target?	Published Climate Change Adaptation/ Resilience Plan
Comune di Assisi	Yes	Absolute target	Yes	Yes
Comune di Bologna	Yes	Absolute target	Do not know	Yes
Comune di Bolzano	Yes	Absolute target	In progress	Yes
Comune di Cosenza	-	Absolute target; Fixed level target	-	Intended in next 2 years
Comune dell'Aquila	Intended in next 2 year	Absolute target	Intended in next 2 years	Intended in next 2 years
Comune di Firenze	Yes	Absolute target	Yes	Yes
Comune di Ferrara	Yes	Absolute target	Yes	Yes
Comune di Genova	Yes	Absolute target	Yes	In progress
Comune di Lucca	Yes	Absolute target	In progress	In progress
Comune di Massa Marittima	-	No target	Yes	In progress
Comune di Milano	Yes	Absolute target	Yes	In progress
Città Metropolitana di Milano	Do not know	No target	Do not know	Yes
Comune di Napoli	Yes	Absolute target	In progress	In progress
Comune di Padova	Yes	Absolute target	Yes	Yes
Comune di Parma	Yes	Absolute target	In progress	Yes
Comune di Pescara	Yes	Absolute target	In progress	Intended in next 2 years
Comune di Prato	Yes	Absolute target	In progress	Yes
Comune di Rimini	Intended in next 2 years	No target	Intended in next 2 years	Intended in next 2 years
Roma Capitale	Yes	Absolute target	Yes	Yes
Comune di Segrate	In progress	No target	In progress	-
Comune della Spezia	In progress	Absolute target	In progress	In progress
Comune di Torino	Yes	Absolute target	Yes	Yes

INSIGHTS FROM CITIES AND REGIONS DISCLOSURES

Table 2. Regions key actions

Region	GHG Emissions Reduction Target(s)	Renewable Energy/ Electricity Target	Climate Change Adaptation Plan	Climate Change Action Plan for Reduction GHG Emissions
Regione Abruzzo	No target	Yes	No	In progress
	Baseline Scenario target;		Yes	Yes
Regione Autonoma della Sardegna	Base year intensity target;	-		
	Base year emissions target			
Regione Lombardia	Base Year Emissions target	Yes	Yes	Yes
Regione Marche	Baseline scenariotarget	Yes	No	In the next 2 years
Regione Piemonte	-	Yes	No	In progress
Regione del Veneto	No Target	No	No	Yes



SCIENCE-BASED CLIMATE TARGETS FOR CITIES

Every day, the <u>science</u> on climate change is telling us we must act urgently to reduce greenhouse gas emissions. Globally, we need to do this by 45% by 2030, and achieve net zero by 2050, in order to limit global warming to 1.5°C above preindustrial levels. Home to 55% of the world's population and accounting for 70% of global emissions, cities have a critical role to play in this transition. Setting science-based climate targets is the best way for cities to ensure they are aligned with these global goals.

What is a science-based target?

A science-based climate target is a measurable and actionable target to reduce city-wide emissions. It represents a city's fair share of the emissions that need to be reduced on a global scale to halve them by 2030 and reach global net zero by 2050. To have a science-based target, a city must have both a long-term net zero target by 2050 at the latest and a 1.5°C-aligned interim target to achieve in the next decade.

Why should cities set science-based targets?

Setting a science-based target gives cities confidence that their planned emission reductions are in line with what is needed to avoid the most catastrophic impacts of climate change. Equity is at the heart of science-based targets, taking into account that cities have different historical contributions to atmospheric emissions levels and different socioeconomic contexts. While globally we need to reach net zero emissions by 2050, science-based targets acknowledge that not all cities will take the same pathway to get there.

How can my city set a science-based target?

- Read the <u>Science-Based Targets Guide for Cities</u> Get an introduction to science-based climate targets and an understanding of three different ways to set yours.
- **Set or check your target -** Use one of the methodologies in the guide to check if your existing target aligns with your fair share of emissions reduction in line with limiting global warming to 1.5 °C. If you do not have a target, or your target needs updating, use one of the methodologies in the guide to set a science-based target.
- Report your target Disclose your target through the CDP-ICLEI questionnaire.
- Receive support from us We will check if your target is a fair share of emissions reduction in line with 1.5 °C and give you feedback and support. To receive help setting or updating your target, contact us at cities@cdp.net.
- Track progress annually Disclose annually to track progress against your target. It may be necessary to update your target over time, based on progress to date and developments in climate science.
- **Join the Cities Race to Zero -** Setting a science-based target is a key element of the global <u>Cities Race to Zero</u> campaign pledge. You can join over 1000 cities committed to reaching net zero emissions by 2050.

For more information, visit our Science-Based Targets webpage.

What is the Science Based Targets Network?

The <u>Science Based Targets Network</u> is a group of over 50 organizations which has been established to develop the tools and approaches needed for cities and businesses to set science-based targets for climate and nature, including water, biodiversity, land and oceans.



CORPORATE DISCLOSURE



370

companies disclosed on climate change



90+

companies disclosed on water security



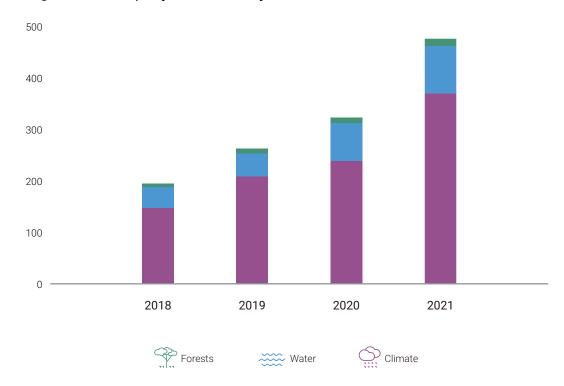
14 companies disclosed on forests'

In 2021, 370 companies disclosed on climate change, which is a 55% increase to the previous year. On water security and forests, over 90 companies for water and 14 companies on forests disclosed, which is a 24% and 40% rise respectively. Overall, companies' disclosure from 2020 to 2021 has increased by 42%.

Corporate disclosure has increased significantly over the last years, despite the challenges of the global pandemic. In 2019, the year before the global pandemic hit the world, 209 Italian companies disclosed their climate information through CDP's platform, while environmental information on water and forest-related topics was disclosed by 45 and 8 companies respectively. In 2021, the number of disclosing companies increased to 370 on climate change, 92 on water security and 14 on forests.

The importance of climate action, and encouragingly also of environmental action, is clearly moving into the mainstream of corporate governance despite other emerging economic challenges as the pandemic. Still overall 37% of companies in Italy requested to disclose information via CDP's platform have not disclosed any information, leaving these companies at risk that they are not managing their climate and environmental risks, impacts and needed actions.

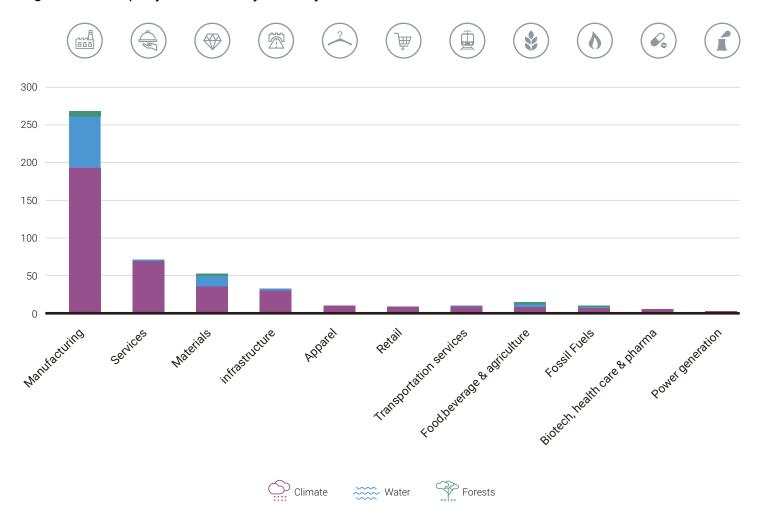
Figure 11. Company disclosure by theme in 2021



CORPORATE DISCLOSURE

A sector breakdown shows that the majority of disclosing companies in Italy operate in the manufacturing sector, followed by services, materials and infrastructure²⁵. In total 192 manufacturing companies reported to the CDP climate change questionnaire, 68 to the water security questionnaire, and seven to the forests' questionnaire.

Figure 12. Company disclosure by industry in 2021



INSIGHTS FROM CORPORATE DISCLOSURE

The corporate disclosure insights unfold how Italian companies are governing climate and environmental issues, how they manage risks and utilize opportunities and how they are planning to reduce their environmental impacts. Further, these insights demonstrate what companies have achieved on the journey to transitioning to a net-zero carbon and nature positive business model.

Corporate climate and environmental performance: CDP scoring of Italian companies

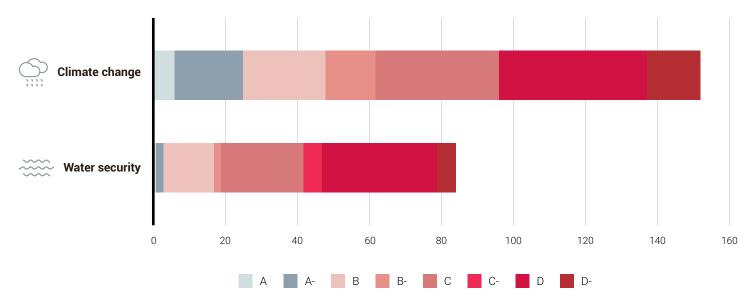
CDP's scoring serves as a proxy to understand a company's transition journey towards a net-zero carbon and nature positive business model. Companies can receive an A to D- score, based on their disclosure and performance related to each question. Only companies finishing their disclosure before the annual deadline for scoring, can subsequently receive a score, thus not all companies disclosing will receive a score.

In 2021, in total 152 Italian companies received a score on their response to the climate change questionnaire. Further, 84 Italian companies received a score on their response to the water security questionnaire. The forests questionnaire has six different commodities, cattle products, soy, palm oil, coffee, cocoa and timber products, which companies are asked to

disclose to based on their sector. Companies can be requested for more than one of the forest-related commodities. Italian companies requested to disclose to CDP's forest questionnaire are covering four commodities, cattle products, soy, palm oil and timber products, for which 10 companies have received 14 scores²⁶.

Six Italian companies received an A score for their responses to the climate change questionnaire in 2021 while 19 received an A-score. The fraction of A scores in this category is thus 4% and for A and A-jointly 16%. Only one Italian company received an A score for their response to the water questionnaire, while two companies received an A-score. The fraction of A scores in this category is thus 1% and for A and A-jointly 4%.

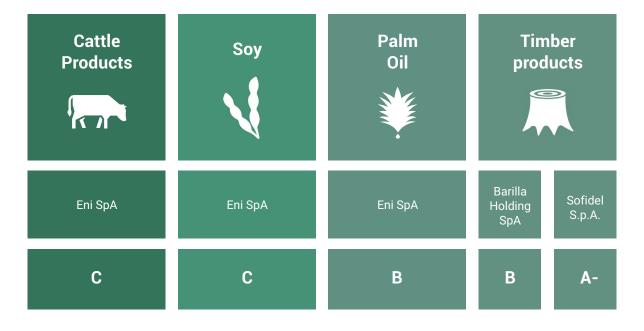
Figure 13. Scoring distribution for climate change and water security questionnaire responses (public and private scores aggregated)



INSIGHTS FROM CORPORATE DISCLOSURE

Many companies disclosing to the forest questionnaire do not disclose their information publicly. Further, only five of the 14 forests score results are classified as public, thus only those scores can be displayed publicly (see figure 14). While not reaching the highest score yet, by disclosing this information publicly these companies make an important step towards greater transparency and action addressing deforestation.

Figure 14. Scoring for forests questionnaire responses (public scores only)

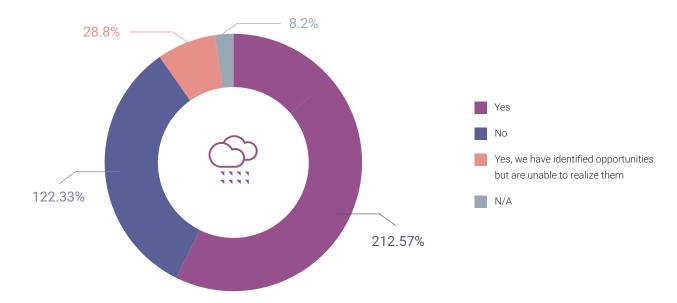


Climate change impacts: Seizing business opportunities from the transition

One of the key parts of the transition is understanding where the opportunities of the transition lie for the company. Thus, CDP's climate change questionnaire asks to identify any climate-related opportunities with the potential to have a substantive financial or

strategic impact on a companies' business. In 2021, 65% of disclosing companies state, that they have identified such opportunities. Of those, 12% (8% in sample) have identified such opportunities but are at this stage unable to realize them for their business.

Figure 15. Italian companies stating whether they have identified climate change opportunities



INSIGHTS FROM CORPORATE DISCLOSURE

Companies can report multiple opportunities and are asked to further specify those. They can choose from five different opportunity types:

- resource efficiency;
- energy source;
- products and services;
- markets;
- resilience.

In 2021, most opportunities for Italian companies relate to products and services (32% of companies name this opportunity type), such as the development of new low-emission and climate adaptation products and services. This figure is closely followed by resource efficiency opportunities (29%), involving the improvement of resource efficiency across production and distribution processes, buildings, machinery/appliances, and

transport/mobility. The third mostly named opportunity type is energy source (24%), involving opportunities related to shifting energy usage toward low emission energy sources, and resource.

Figure 16 shows the evolution of the relative importance of the five opportunity areas over time. Products and services have been a key area of opportunity for companies throughout the last years. Yet, products and services has comparatively to the other areas seen a small decline since 2018. In contrast, the share of companies naming resource efficiency as opportunity has been growing. Market related opportunities, thus opportunities in new markets or types of assets that may help companies to diversify their activities and better position them for the transition to a lower-carbon economy, have seen a dip in 2021 disclosures compared to previous years. Opportunities in resilience related to the development of adaptive capacity to respond to climate change have so far been of relatively low importance to companies over the full timeframe. Figure 17 further shows absolute numbers of opportunity reporting in 2021, by opportunity type.

Figure 16. Share of disclosing companies naming each of the five opportunity types, 2018-2021

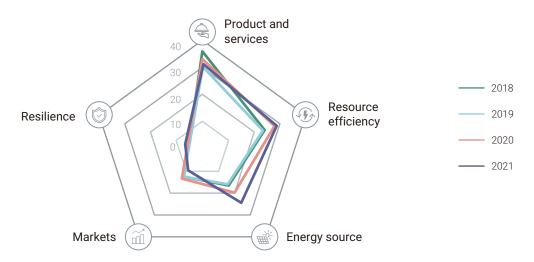
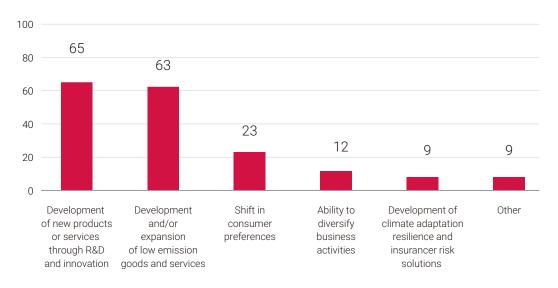


Figure 17. Number of companies and listed opportunities by type in 2021

118	107	90	35	25
Companies identify	Companies identify	Companies identify	Companies identify	Companies identify
183	146	111	44	30
Opportunities related to Products and Services	Opportunities related to Resource Efficiency	Opportunities related to Energy Source	Opportunities related to Markets	Opportunities related to Resilience

Companies are asked to define the primary climaterelated opportunity driver for the different opportunity types identified. As products and services are the most prominent opportunity type in the Italian sample, Figure 18 maps the primary drivers of this opportunity type.

Figure 18. Primary climate-related opportunity drivers for opportunity type 'products and services'



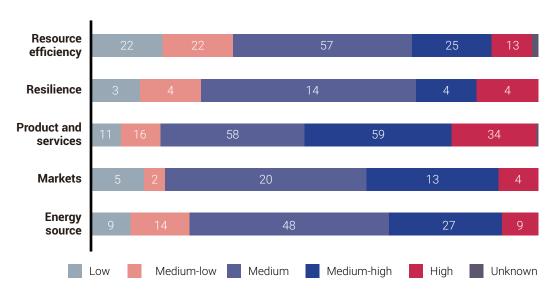
The ability to diversify business activities and the development of climate adaptation, resilience and insurance risk solutions is anticipated and understood as an opportunity by a fraction of Italian companies.

The development of new products and services through R&D and innovation is the most prominent driver of opportunities related to products and services (listed 65 of 183 times, 36%). Yet this is closely followed importance of the development and/or expansion of low emission goods and services (listed 63 of 183 times, 34%). Also, a shift in consumer preferences, the ability to diversify business activities and the development of climate

adaptation, resilience and insurance risk solutions is anticipated and understood as opportunity by a fraction of Italian companies.

Some companies further disclose the expected magnitude of impact of the opportunities reported. Figure 19 shows the number of opportunities by magnitude (low, medium-low, medium, medium-high, and high) for the five opportunity types^x.

Figure 19. Share of impact magnitude by opportunity type



It shows that the fraction of a medium-high or high impact assessments is largest for product and service-related opportunities, which seems to reflect the general notion of importance of this opportunity type in the sample. Noteworthy, also a large fraction of companies classifies the magnitude of impact for market related opportunities as medium-high, although this opportunity has been named by comparably few companies in the sample.

INSIGHTS FROM CORPORATE DISCLOSURE

Corporate climate and environmental targets:

The need to mainstream long-term science-based approaches

Without clear targets to provide direction and structure to the company's environmental strategy, it is unlikely that companies will achieve the emission reductions and nature positive impact needed to limit climate change and halt nature loss. Thus, through CDP's disclosure platform companies report their targets.

About 40% of Italian companies report an emission reduction target. Most of those companies report absolute emission targets (23%), while only about 8% report intensity targets and 11% report having both target types in place.

Figure 20. Companies reporting emission reduction targets

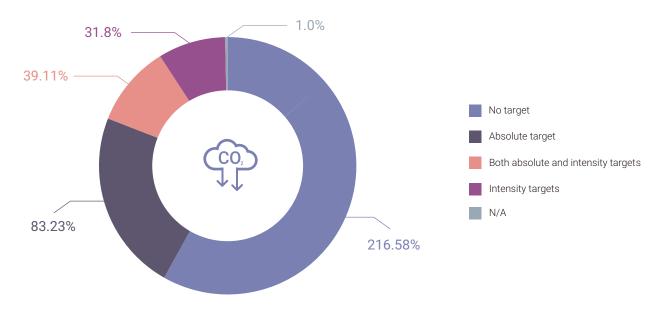
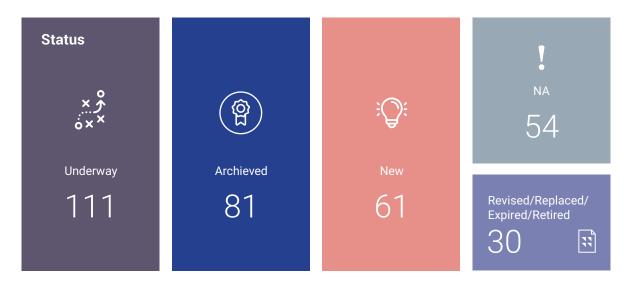


Figure 21. Status of reported targets



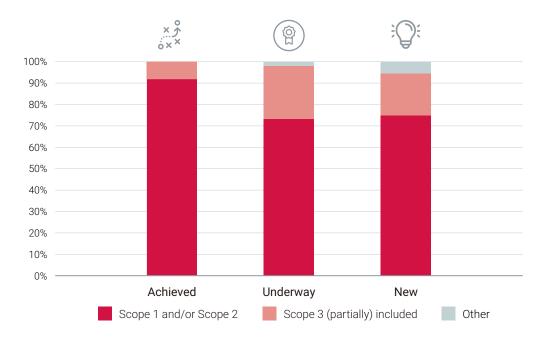
Some companies provide further details on their targets such as the target status, categorised as underway, new, achieved or outdated. Most of the targets are underway (111 targets), while a considerable fraction is reported to be already achieved (81 targets) or new (61 targets)²⁷.

INSIGHTS FROM CORPORATE DISCLOSURE

When looking at the emissions scopes covered by targets, it shows that the share of targets covering any type of scope 3 emissions is almost twice as high in new and underway targets compared to already achieved targets²⁸. Whilst two thirds of

targets still cover scope 1 and 2 exclusively, it is encouraging to see that companies are increasingly also dealing with their scope 3 emissions when setting new targets.

Figure 22. Scope 3 targets - Underway and new vs. achieved targets



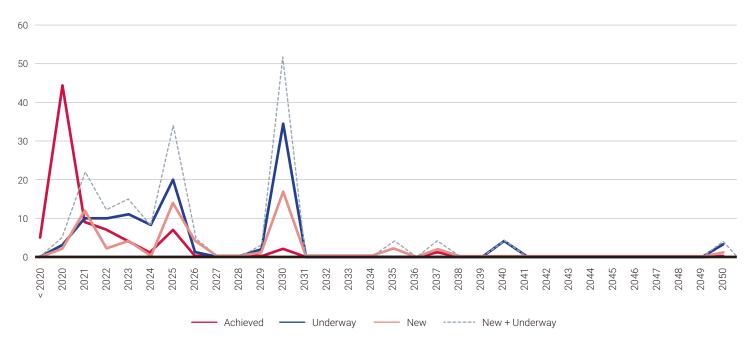
Another key component of target setting is the time horizon as defined by a target base- and target year. Figure 23 takes a closer look at the reported target years, split by the target status.

The key target year for underway- and new targets is 2030, capturing more than 50 targets. A smaller 'spike' in target year for

underway- and new targets can be seen in 2025. Only a handful of targets reflect later target years such as 2035, 2040 and 2050.

Most of the achieved targets have target years in- or before 2020. Yet a few ambitious companies seem to have achieved their targets before their actual target year.

Figure 23. Target year - Underway and new vs. achieved targets

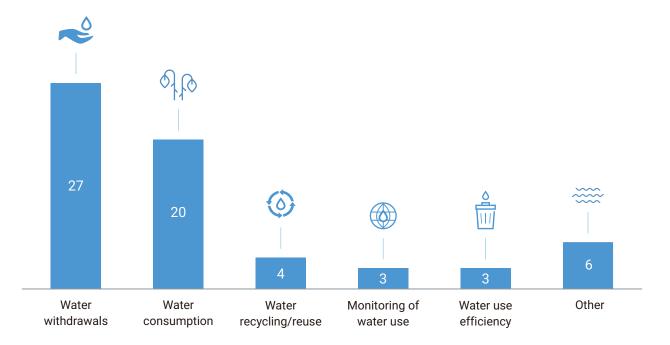


INSIGHTS FROM CORPORATE DISCLOSURE

Beyond emission reductions, the importance of reducing environmental impacts and moving towards nature positive impacts is receiving more attention by companies. Looking at targets related to responses to the CDP water- and forest questionnaires adds to a more holistic view on companies' target setting.

Reducing adverse freshwater impacts and water pollution, most of water-related targets monitored at the corporate level address water withdrawal, followed by targets related to water consumption. Considerably fewer targets focus on water recycling/reuse, the monitoring of water use, water efficiency or other categories.

Figure 24. Companies' water targets monitored at corporate level, by category of target²⁹



Nine companies disclose they have set timebound and quantifiable targets for increasing sustainable production and/or consumption of the forests commodity the company is requested to disclose on (timber, soy, cattle, palm oil, cocoa and/or coffee).

Yet, there are only two publicly disclosed forest-related targets, both related to the third-party certification for timber products. Those targets are reportedby Barilla Holding and Sofidel delivering valuable insights on forest-related target setting strategies.

Timber products	Barilla Holding SpA	Third-party certification target: Barilla has set the target to purchase, by 2020, 100% of paper and timber-based products containing virgin pulp from sustainably managed forests. The Company has decided to reach this target by establishing clear criteria to ensure responsible sourcing of the paper and cardboard used in its product packaging by using a supply chain managed in accordance with internationally recognized standards. These standards guarantee sustainable forest management based on environmental protection, from countries that are not responsible of deforestation and forest degradation (these qualification criteria are mandatory for our suppliers and must be respected). Barilla's strategy has allowed to reach its target already in 2018.
Timber products	Sofidel S.p.A	Third-party certification target: Sofidel commits itself to mantain an overall target of purchasing 95% of the total virgin fibre sourced by the year 2025 with FSC®, and PEFC™ Chain of Custody sources. This target is linked to Sofidel's zero net/gross deforestation.



Science-based company-wide emission reduction targets in line with 1.5°C

Urgent climate action is needed to decarbonize the global economy at the pace and scale that is dictated by science. To drive this transition, CDP, as one of the partner organizations of the Science Based Targets initiative (SBTi), is driving companies to take bold action by setting science-based targets (SBTs) – GHG targets in alignment with the goals of the Paris Agreement.

SBTs have become global best practice in near-term emissions target-setting. Since the SBTi's launch in 2015, more than 2,200 companies have joined, and more than 1,000 companies have had their targets approved. Recognizing the need for credible long-term trajectories in addition to near-term SBTs, the SBTi launched the first framework for corporate net-zero target setting in October 2021: the Net-Zero Standard. While more than 700 companies have made a public commitment to achieve a state of net-zero value chain emissions by 2050, there is still an urgent gap to close, especially across energy-intensive sectors.

After slow but steady joining rates, Italy has seen a steep increase in companies committing to and setting science-based targets over the past two years. There are now 38 companies committed out of which 14 have committed to the highest level of ambition through the Business Ambition 1.5°C Campaign and 25 companies have had their targets approved³⁰. While the first Italian company (Enel S.p.A.) has had their targets approved more than six years ago, 23 out of the 25 Italian companies with targets in place have had their targets approved during the last two years alone. Taking a closer look at the approved SBTs in Italy, it is worth noting that the majority (13), are already aligned with the highest level of ambition, a 1.5°C pathway, whereas the remaining targets are still aligned with well-below 2°C (10) and 2°C (2) scenarios. The sectors that record the strongest uptake in Italy are textiles and electric utilities, representing more than a third of commitments and almost a half of the approved targets.

Furthermore, Italy has seen more and more companies from energy-intensive sectors setting Paris aligned emissions targets. Among others, Cementir Holding NV has had well-below 2°C aligned targets approved and Danieli & C Officine Meccaniche S.p.A. has publicly committed to increasing their ambition and setting a 1.5°C aligned target. Enel, the largest utility in Europe, was not only among the first European companies ever to join the SBTi in 2015 but it has also increased the ambition of their targets to 1.5°C and has further committed to achieve net-zero value chain emissions by 2050 at the latest.

The graph below shows the growth of commitments and approved SBTs by Italian companies since 2015.

Figure 25. Science-based target commitments and targets in Italy, 2015 - 2021



COLLABORATION ACROSS ALL LEVELS OF GOVERNMENT AND NON-PARTY STAKEHOLDERS IS ESSENTIAL FOR EFFECTIVE CLIMATE ACTION

The warnings of the Intergovernmental Panel on Climate Change's <u>Sixth Assessment</u> <u>Report</u> in August 2021 could not be clearer: climate change is a code red for humanity and system-wide action is needed to limit the irreversible impacts of climate change.

1.5°C resilient future, we need to halve global emissions by 2030

It is then a time for cities and countries to come together, for disparate bodies to work together, share knowledge, and develop policy to focus efforts before it becomes too late. National governments, regions, cities and companies must all commit to ambitious plans to mitigate against, and adapt to, the rise in the earth's temperature. We need to halve global emissions by 2030 if we are to reach a 1.5°C resilient future.

State, regional and city-level collaboration is a powerful force for change in the climate crisis and creates positive momentum. Furthermore, this collaboration is pivotal to delivering effective climate action. In fact, according to the analysis conducted by CDP, more than a quarter of disclosing cities globally, and 10 out of the 23 of the disclosing cities in Italy say reaching their emissions reduction targets also relies on policy outside their control.

Figure 26. Regions' collaboration activities

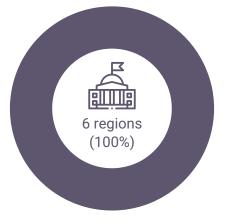
Collaborate with cities/local governments



Top 4 Action Areas:

- Energy Efficiency (5 cities)
- ▼ Emission Reduction (4 cities)
- ▼ Climate adaptation (2 regions)
- Renewable Energy (2 regions)

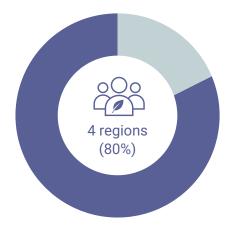
Collaborate with national governments



Top 3 Action Areas:

- ▼ Energy Efficiency (4 regions)
- Emission Reduction (3 regions)
- ▼ Climate adaptation (3 regions)

Collaborate with business



Top 4 Action Areas:

- ▼ Emissions reduction (2 regions)
- Forest restoration/Reforestation (2 regions)
- Climate adaptation (1 region)
- ▼ Energy efficiency (1 region)

Figure 26 shows the number and fraction of regions reporting to collaborate with local authorities, national governments and businesses in developing and/or meeting each other's environmental-related targets, goals and/or strategies. It also highlights the top three action areas on which those regions collaborate on with the respective entities, in terms of regions naming the listed action areas.

Despite all the levels of collaboration shown above, CDP's analysis shows that while collaboration is already happening at multiple levels, all actors need to go further and faster together to deliver tangible climate action³¹.

THE EUROPEAN CLIMATE PACT

THE NEW PLATFORM FOR COLLABORATIVE CLIMATE AND ENVIRONMENTAL ACTION IN THE EU



#EUClimatePact

The <u>European Climate Pact</u> provides a platform to work and learn together, develop solutions, and achieve real change.

Through the Pact, cities can formalise their collaboration with other actors by **making a joint pledge**. A pledge is a public commitment to respond to the climate and environmental challenges in a way that can be measured and/or followed-up.

Cities can make either solo or joint pledges, as well as have their mayor or political representative become a <u>Pact organizational ambassador</u>.

The Pact universe offers multiple opportunities for cities, citizens, communities, businesses, and other actors to participate in climate and environmental action across Europe. This includes organising events, providing useful material, and supporting the pledging journey, for example.

In Italy, Torino and Padova have already showcased their leadership by converting their disclosure data into Pact pledges. You can <u>see these and other examples here</u>.

The European Climate Pact is a project of the European Commission supporting the implementation of the European Green Deal. CDP is a member of the Secretariat delivering the project. Your city can use its disclosure data to streamline the pledging process. From 2022 this can be done directly through the CDP-ICLEI Unified Reporting System). Get in touch to learn more.



APPENDIX

Endnotes

- 1 UNFCCC: Global Stocktake.
- 2 Please find the report including further information on sample and methodology as well as comprehensive results here: Italy Temperature Rating (2021). Further, please find a more general note on the <u>CDP-WWF temperature rating methodology</u>. Other than most other parts of this reportithis analysis sample relates to 2020 CDP response data and consists of 194 Italian companies. Emissions data corresponds to the reporting year 2019.
- 3 Companies without any- or insufficient target data covering the respective emission scopes receive a default temperature rating of 3.2°. The overall temperature score for scope 1 and 2 emissions for the Italian sample is 2.0° whereas it is 2.8° considering all emission scopes (scope 1, 2 and 3).
- 4 See more detailed results in targets analysis in the company analysis part.
- 5 Please find the referenced inventory file here.
- 6 The assessment is based on the CDP-ACS classifications for companies' primary industry.
- 7 In total, only 6 companies in the analysis sample receive a 1.5° temperature rating.
- 8 The disclosure data captured in this report was extracted at the end of November 2021. Please note that the data of one additional city that disclosed after November is not represented in the aggregate data analyses but only used for exemplary anecdotal evidence. While only 23 cities are captured in the aggregate analyses, the total of Italian cities disclosing on the Platform in 2021 is 24.
- 9 ICLEI is a leading network of more than 1,750 local and regional governments worldwide. To learn more about the partnership and how to disclose through the UnifiedReporting System, please visit our website: https://www.cdp.net/en/guidance/guidance-for-cities#ICLEI.
- 10 CDP and ICLEI: A unified climate reporting platform for cities CDP
- 11 Cities CDP
- 12 Climate Emergency Declaration
- 13 CDP: Working together to beat the Climate Crisis
- 14 CDP unveils new generation of 95 cities leading on global climate action
- 15 Co-benefits of climate action CDP
- 16 UK COP 26 Adaptation
- 17 Corriere della Sera
- 18 ANSA Liguria
- 19 CRN IBE Climate Services: Drought Observatory
- 20 Race to Resilience (unfccc.int)
- 21 CDP: Cities at risk
- 22 IPCC: Mitigation Pathways Compatible with 1.5C
- 23 Global Covenant of Mayors
- 24 UNFCCC: Race to Zero & Race to Resilience
- 25 Sector assessments and breakdowns in this report are based on the CDP-ACS classifications for companies' primary industry.
- 26 53 of the water scores are based on responses to the minimum-tier questionnaire. 14 of the forests scores are based on responses to the minimum-tier questionnaire.
- 27 Either revised, retired, replaced, or expired.
- 28 "Scope 3 (partially) included" refers to any target involving scope 3 emissions such as e.g. targets relating to scope 3 (upstream and/or downstream), scope 1,2 and 3 scopes jointly, or targets relating to particular scope 3 categories.
- 29 The top 5 target categories are displayed while are other targets are categorized as 'Other' targets.
- 30 SBTi data as of mid December
- 31 CDP Working together to beat the Climate Crisis





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CDP Europe and the CDP global system

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 590 investors with over \$110 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 14,000 organizations around the world disclosed data through CDP in 2021, including more than 13,000 companies worth over 64% of global market capitalization, and over 1,100 cities, states and regions. Fully TCFD aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative. Visit cdp.net or follow us @CDP and on LinkedIn to find out more.

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CDP Europe's annual report is available here and its regular policy newsletter can be joined here.

CDP Europe gratefully acknowledges funding support

By the Ministry of Ecological Transition of the Republic of Italy. The content of this publication is the sole responsibility of CDP Europe and can under no circumstances be regarded as reflecting the position of the Ministry of Ecological Transition.

Building on the successful previous collaboration and government endorsement encouraging Italian companies, cities and regions to disclose their environmental information and take action, CDP Europe and the Italian Ministry of Ecological Transition signed a third programme of work in November 2020. CDP Europe collaborates with the Ministry to build environmental transparency and raise climate ambitions, using CDP's data, research, and capacity building.



CDP Government Partnerships

CDP Government Partnerships are designed to help governments analyze the impact of policies and regulation to achieve carbon-neutrality and resource efficiency by 2050. CDP's global disclosure system equips national, EU and international policymakers and governmental bodies with the data they need to track and measure the impact of policies, identify gaps, trends and best market practice that can be tackled and incentivized through policymaking to create positive impact and drive the transition.

By endorsing the CDP disclosure system, governments can actively drive the increase in quantity and quality of climate and environmental data of corporates and local governments as well as action on climate change, water insecurity and deforestation.

The Dutch Government, the Ministry of Foreign Affairs, France, and the Ministry for Ecological Transition, Italy, are endorsers of CDP's disclosure requests.

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