

The Carbon Disclosure Project

CDP Cities 2012 Global Report

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What is the Carbon Disclosure Project?

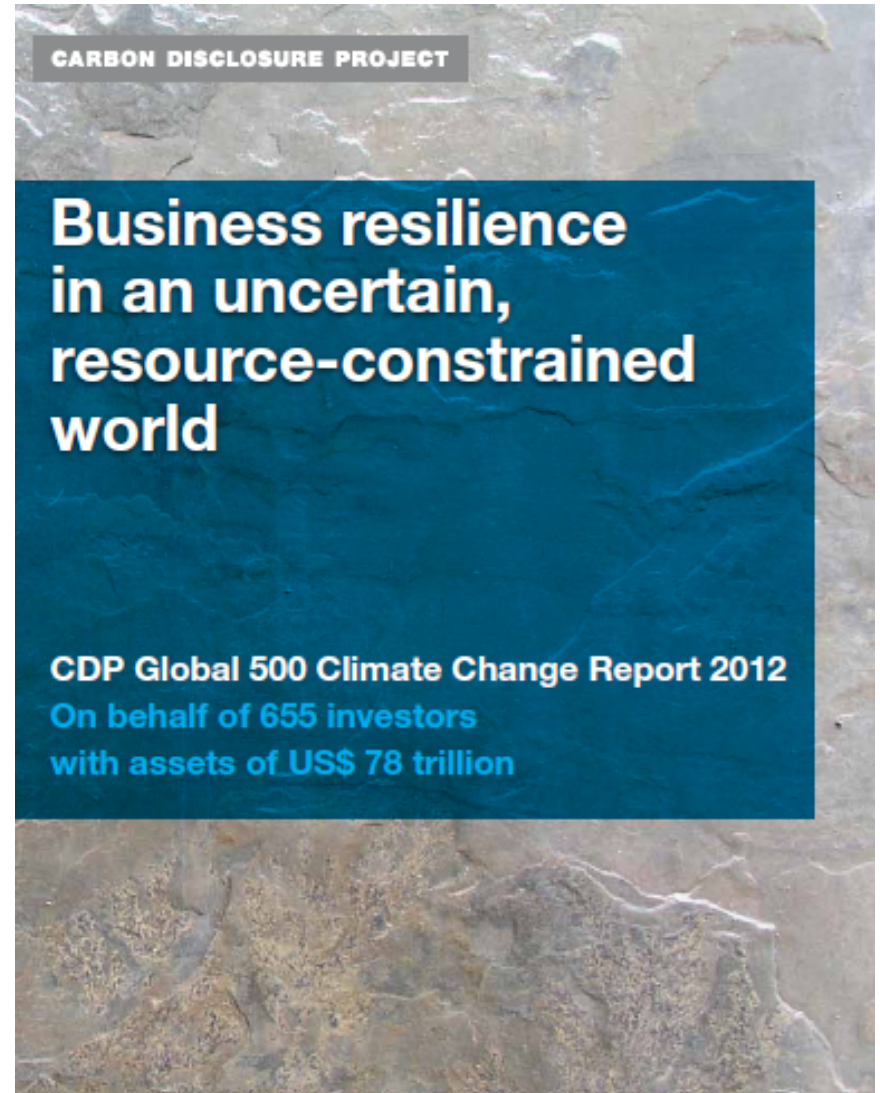
- Not-for-profit organization that works to reduce greenhouse gas emissions and drive sustainable water use
- Works with 655 institutional investors holding US\$78 trillion in assets to help reveal the risk in their investment portfolios.
- Requests information on GHG emissions, energy use and the risks and opportunities from climate change from thousands of the world's largest companies and cities
- 50 purchasing organizations such as Dell, PepsiCo and Walmart, National Grid are using the global CDP system to mitigate environmental risk in their supply chains



CDP City Los Angeles

Corporate Disclosure

This year 81% of corporations from the Global 500 responded to the CDP questionnaire.



Global Advisor and Report Writer

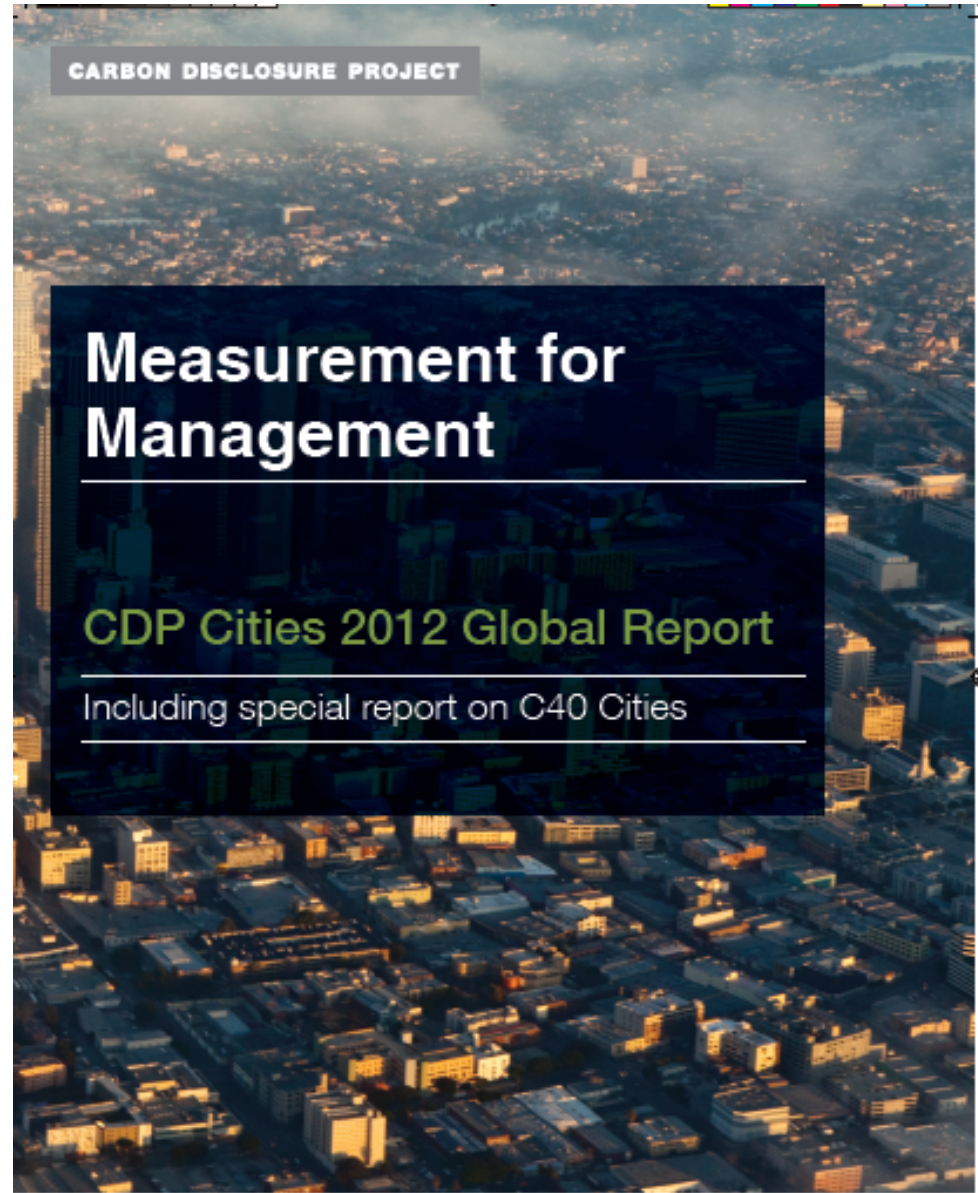


CDP Cities Program

40 cities responded last year

73 cities responded this year reporting:

- GHG inventory
- Reduction targets
- Emission Reduction activities
- Impacts
- Risks
- Opportunities
- Adaptation activities



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C40
CITIES
A GLOBAL LEADERSHIP GROUP

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CARBON DISCLOSURE PROJECT

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We work with

» Investors

» Companies

Climate change program

Water program

Supply Chain program

» **Cities**

» Government & policymakers

Worldwide

Global operations

» CDSB reporting framework

Discover how the world's largest public corporations are tackling climate change.

CDP Global 500 Climate Change Report, S&P 500 Report & 2012 responses are now available for download

The Carbon Disclosure Project (CDP) is an independent not-for-profit organization working to drive greenhouse gas emissions reduction and sustainable water use by business and cities.

We provide a transformative global system for thousands of companies and cities to measure, disclose, manage and share environmental information. When provided with the necessary



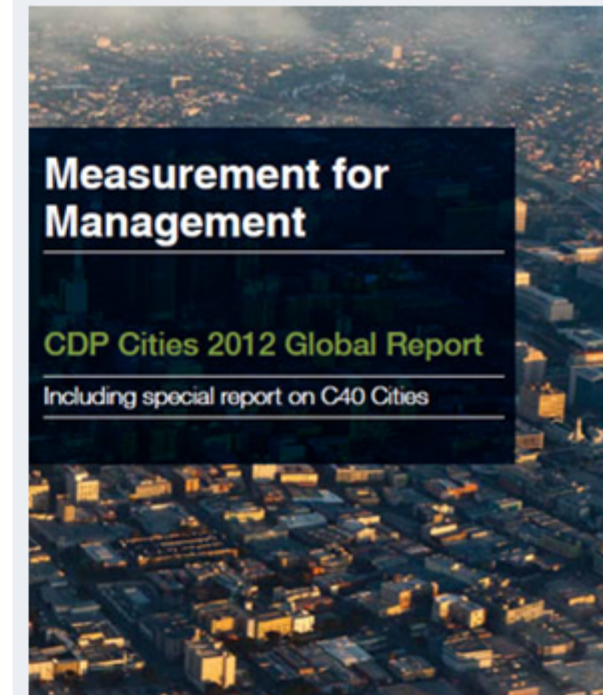
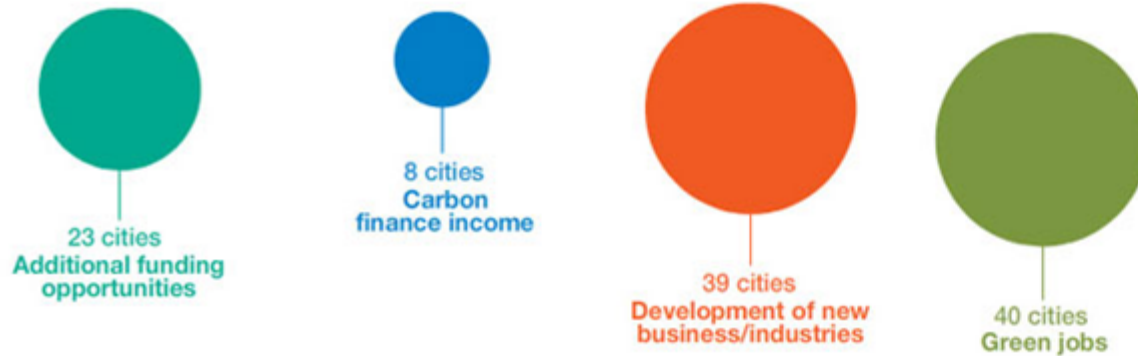
CDP Cities

CDP Cities provides a voluntary climate change reporting platform for city governments. CDP Cities is open to any city government, regardless of size or geographic location.

Each year, CDP invites a sample of cities to participate. For 2012, CDP has invited [C40 member cities](#), as well as the largest cities in each region of the world.

> Click on the infographic below to see more data from the 2012 report

Cities anticipate economic opportunities from climate change. What are these opportunities?



[Events & webinars](#)



“ The increased energy security is maximized by working towards becoming independent of fossil fuels by using biomass, geothermal energy, photovoltaics and wind instead.
Copenhagen ”

“ The Mayor is working towards a target of generating 25% of energy from cleaner, local sources by 2025.
London ”



“ Since the renewable energy is developing, the energy diversity is increasing. KCG is developing renewable energy and promoting energy conservation. Thus, less dependence on imported fossil fuel is expected and energy security is increasing.
Kaohsiung ”



Energy security
15 cities
Increased energy security



“ Continued investment in the exploitation of renewable and alternative energy are increasing Ireland's energy security.
Dublin ”

“ Since the city has a problem of power outages, an energy mix (solar and wind energy) can have a positive impact on the city energy as it would ease the pressure on our electricity grid.
Pietermaritzburg ”



CARBON DISCLOSURE PROJECT

Measurement for Management

CDP Cities 2012 Global Report

Including special report on C40 Cities

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CDP Cities 2012

73 cities

45 C40 cities

* Cities that report privately



CDP Cities 2012

Respondents

Africa

Addis Ababa City Administration
Antananarivo
City of Abidjan
City of Durban
City of Johannesburg
City of Lagos
City of Pietermaritzburg
Ekurhuleni Metropolitan
Municipality
Ville de Dakar

East Asia

Changwon City
City of Yokohama
Government of Hong Kong Special
Administrative Region
Kaohsiung City Government
Seoul Metropolitan Government
Taipei City Government
Tokyo Metropolitan Government

CDP Cities 2012 Respondents

Europe	Europe
Ajuntament de Barcelona	Comune di Oristano
Ayuntamiento de Madrid	Dublin City Council
Basel-Stadt	Free and Hanseatic City of Hamburg
City of Amsterdam	Gemeente Rotterdam
City of Berlin	Greater London Authority
City of Copenhagen	Istanbul Metropolitan Municipality
City of Helsinki	Moscow Government
City of Manchester	Riga City
City of Paris	Roma Capitale
City of Stockholm	Village of Kadiovacik* 215 people!
City of Warsaw	
Comune di Milano	

CDP Cities 2012 Respondents

South Asia and Oceania	Latin America
Bangkok Metropolitan Administration	Alcaldía Metropolitana de Caracas
City District Government Karachi	Bogotá Distrito Capital
City of Melbourne	City of Buenos Aires
City of Sydney	City of Guadalajara
Jakarta City Government	Municipalidad de Santiago
	Municipality of Curitiba
	Prefeitura de São Paulo
	Prefeitura do Rio de Janeiro
	San Salvador

CDP Cities 2012 Respondents

North America

City of Atlanta
City of Austin
City of Chicago
City of Dallas
City of Denver
City of Edina
City of Houston
City of Las Vegas
City of Los Angeles
City of Miami
City of Philadelphia
City of Phoenix

North America

City of Portland, Oregon
City of San Diego
City of San Francisco
City of Seattle
City of St Louis
City of Toronto
City of Vancouver
District of Columbia
New York City

Measurement – cities reporting city wide emissions (70%)

North America



17
of 21 cities

Latin America



5
of 9 cities

Europe



19
of 22 cities

Africa



1
of 9 cities

East Asia



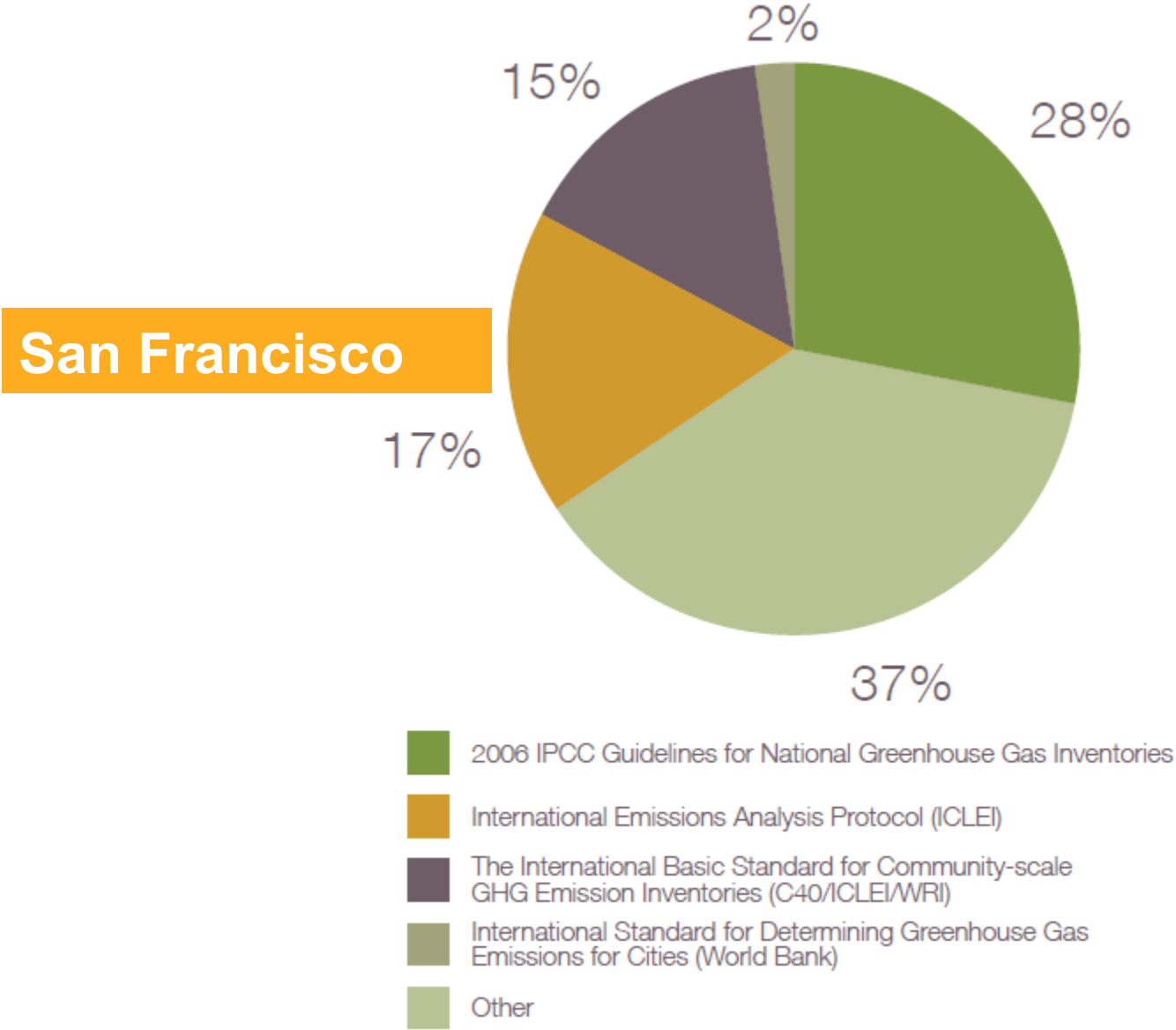
6
of 7 cities

South Asia / Oceania



3
of 5 cities

Measurement – what protocols are cities using?



Measurement – smart growth?

SF: 815,358 population

SF: 6,683 people per square km



Smaller cities
Annual greenhouse gas emissions per capita in cities with populations less than 1.6 million



Larger cities
Annual greenhouse gas emissions per capita in cities with populations greater than 1.6 million

SF: 6.4 tonnes GHG per capita

Measurement – economic efficiency per tonne GHG



European cities
Annual economic output per tonne of greenhouse gas emissions in European cities



North American cities
Annual economic output per tonne of greenhouse gas emissions in North American cities

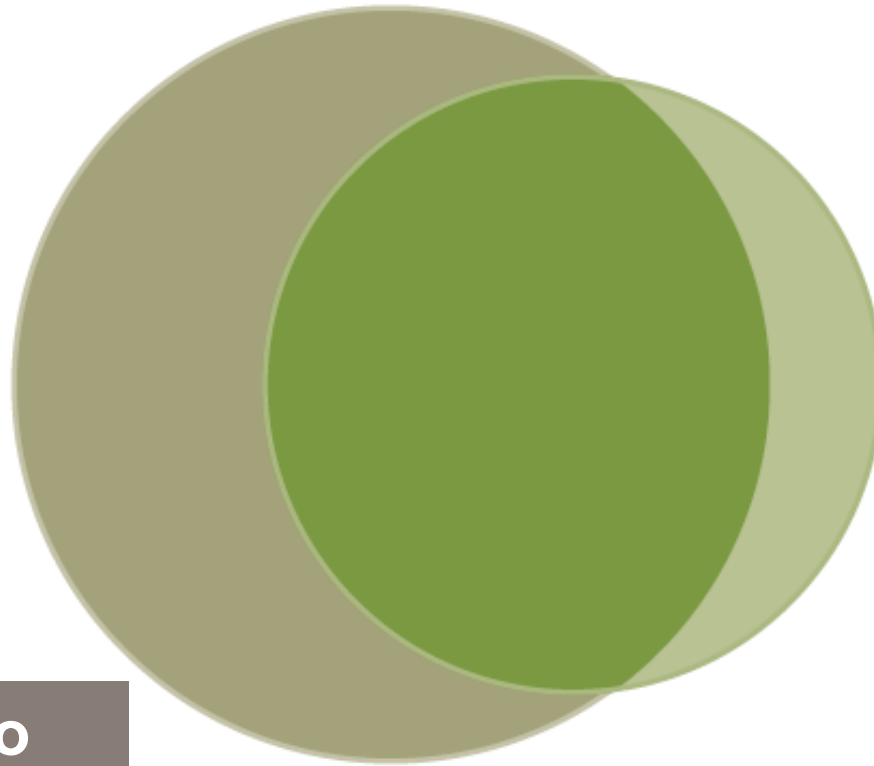
San Francisco = \$10,600

Measurement – why is it important?

“Performing a local and regional emissions inventory had the added benefit of identifying inefficiencies in operations by tracking data related to energy consumption, waste processes and water consumption at the government operations and regional levels. The reviews have helped the City cut cost and improve operations through analysis of City facilities, streetlights, wastewater treatment, and fleet operations.”

Las Vegas

Is Climate Change an economic risk or an opportunity?



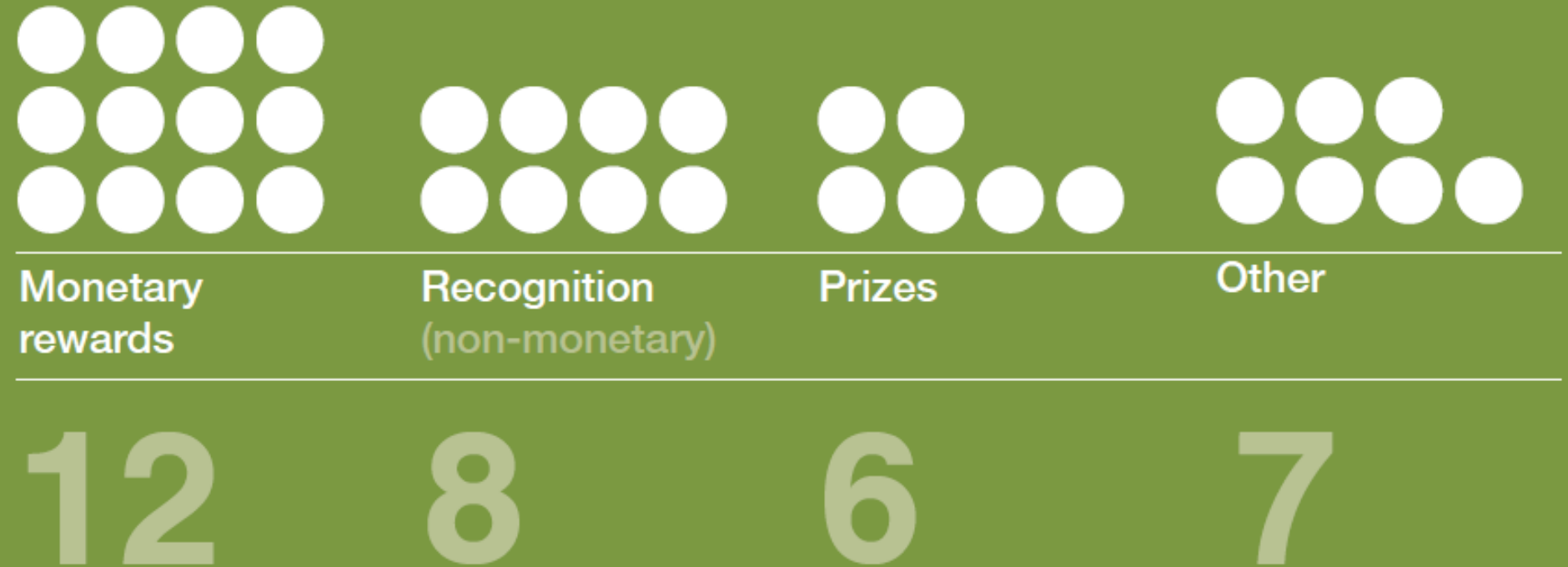
San Francisco

- 82% of cities reporting economic opportunity
- 67% of cities reporting economic risk
- 59% of cities report both

Cities that think green jobs are an economic opportunity as a result of climate change



Cities providing incentives for climate change actions



Specific Incentives

Melbourne

- An agreement with employees provides for a 0.5% annual pay increase additional to an annual 3.5% pay rise if environmental targets are met. These relate to energy reduction, waste reduction, and increases in sustainable transport practices.

New York

- The Energy Incentive Alignment Program holds seven of the largest agencies to their electricity budget by allowing them to keep energy budget surpluses but also requiring them to pay back budget deficits to the central budget office.

Helsinki

- Some departments in the city organization have energy efficiency performance as one part in the criteria for annual performance-related bonus.



**A GREENER,
GREATER
NEW YORK**

Does climate change pose a physical risk to cities ?



Of 73 cities surveyed:



36 cities are reporting risks from drought.



San Francisco
53 cities are reporting risks from frequent / intense rainfall.



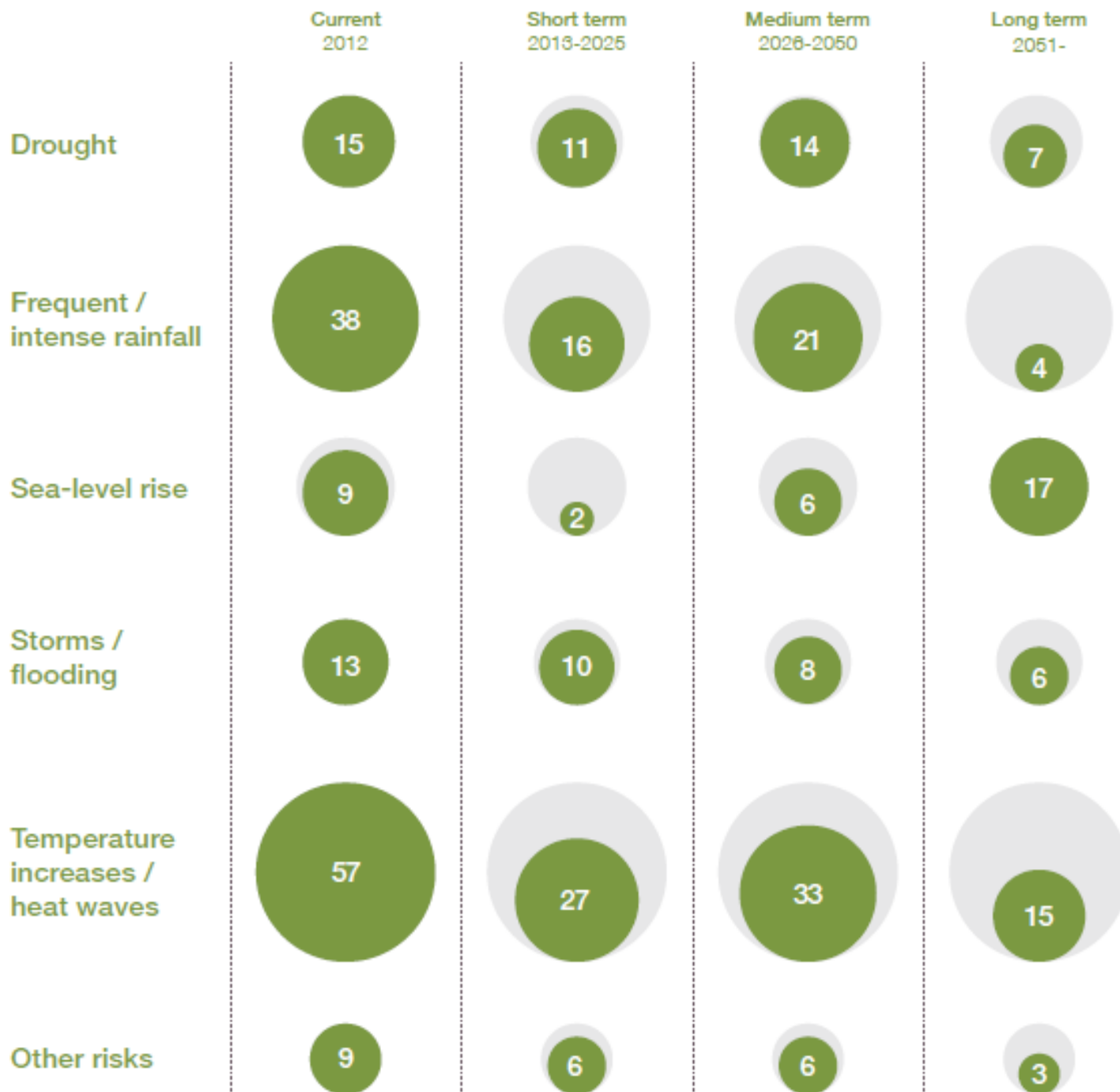
San Francisco
31 cities are reporting risks from sea-level rise.



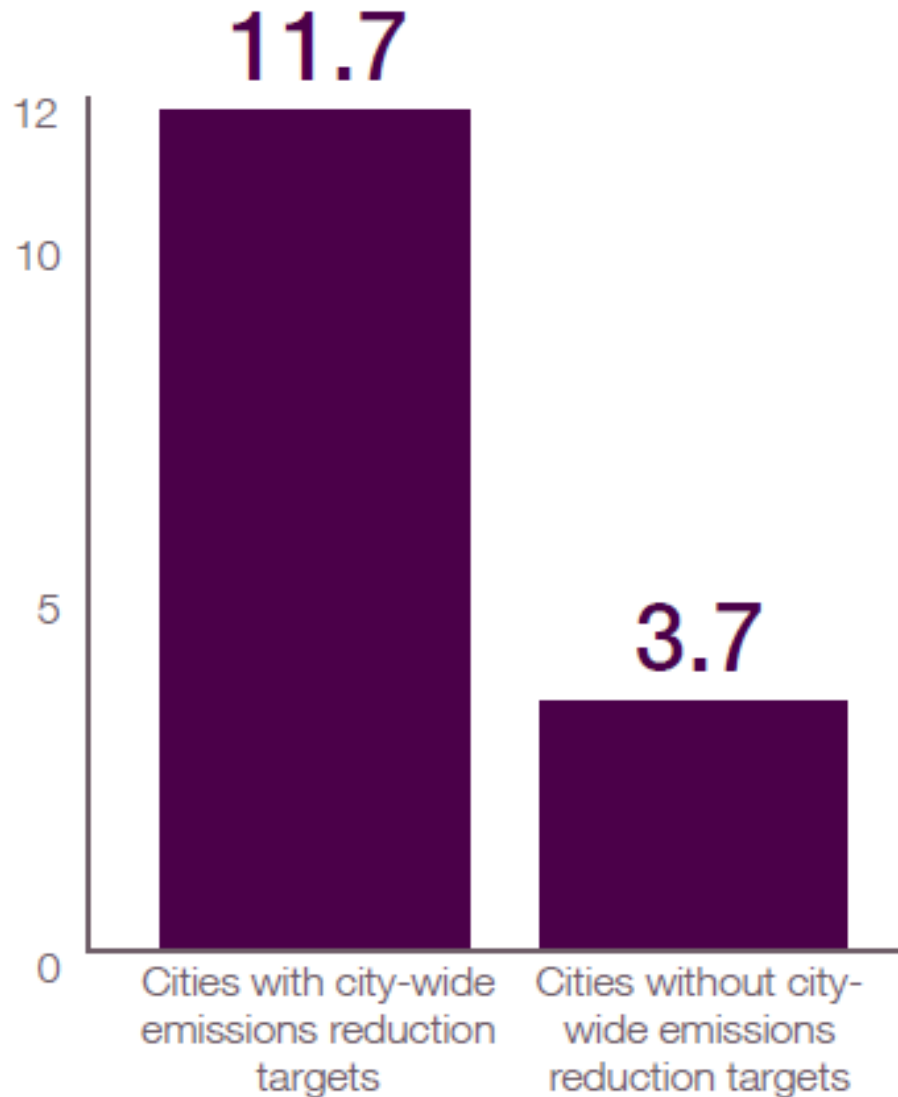
San Francisco
28 cities are reporting risks from storms / floods.

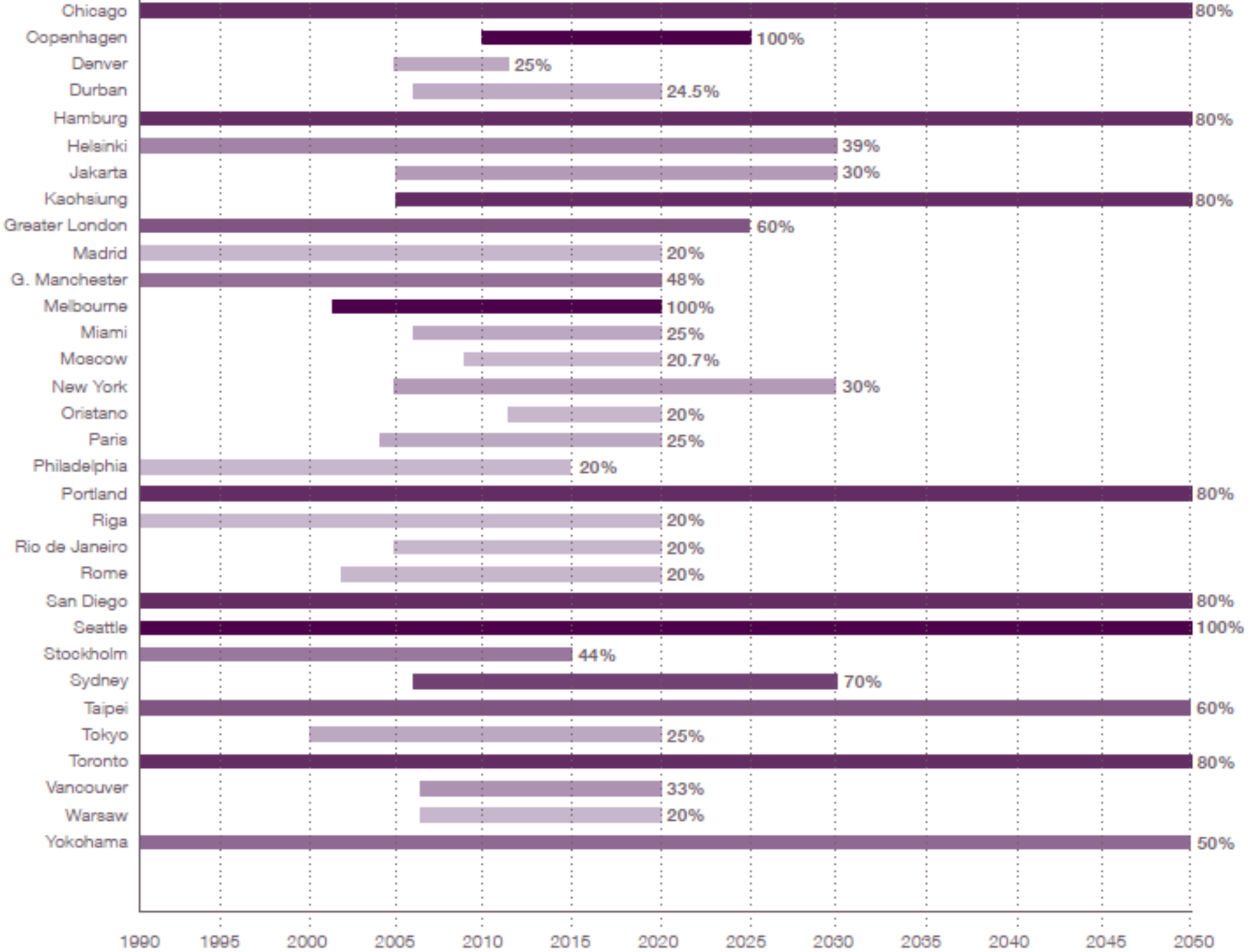


58 cities are reporting risks from temperature increase / heat waves.

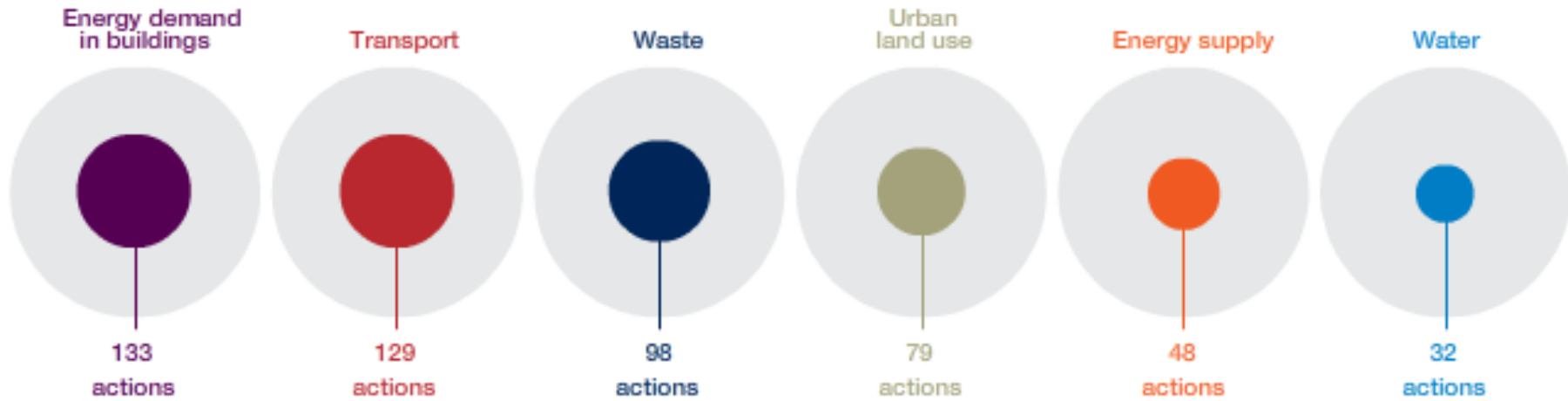


Management: Average number of emission reduction activities by presence / absence of reduction targets

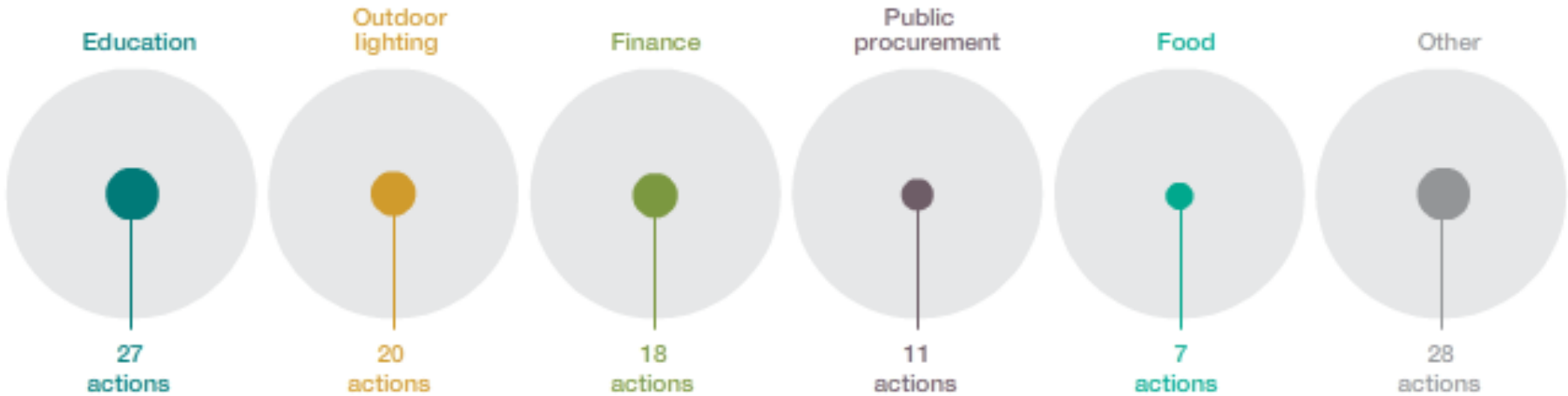


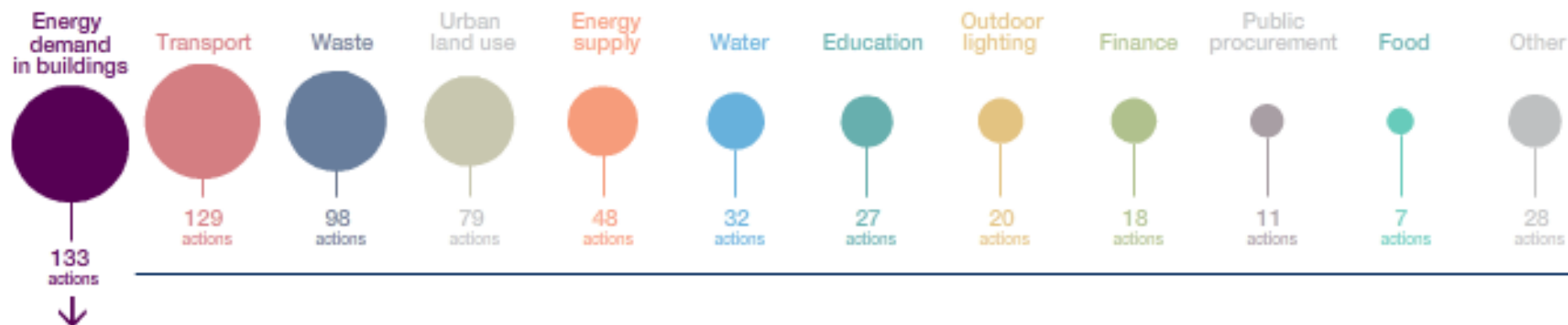


Cities report 630 actions to reduce greenhouse gas emissions:

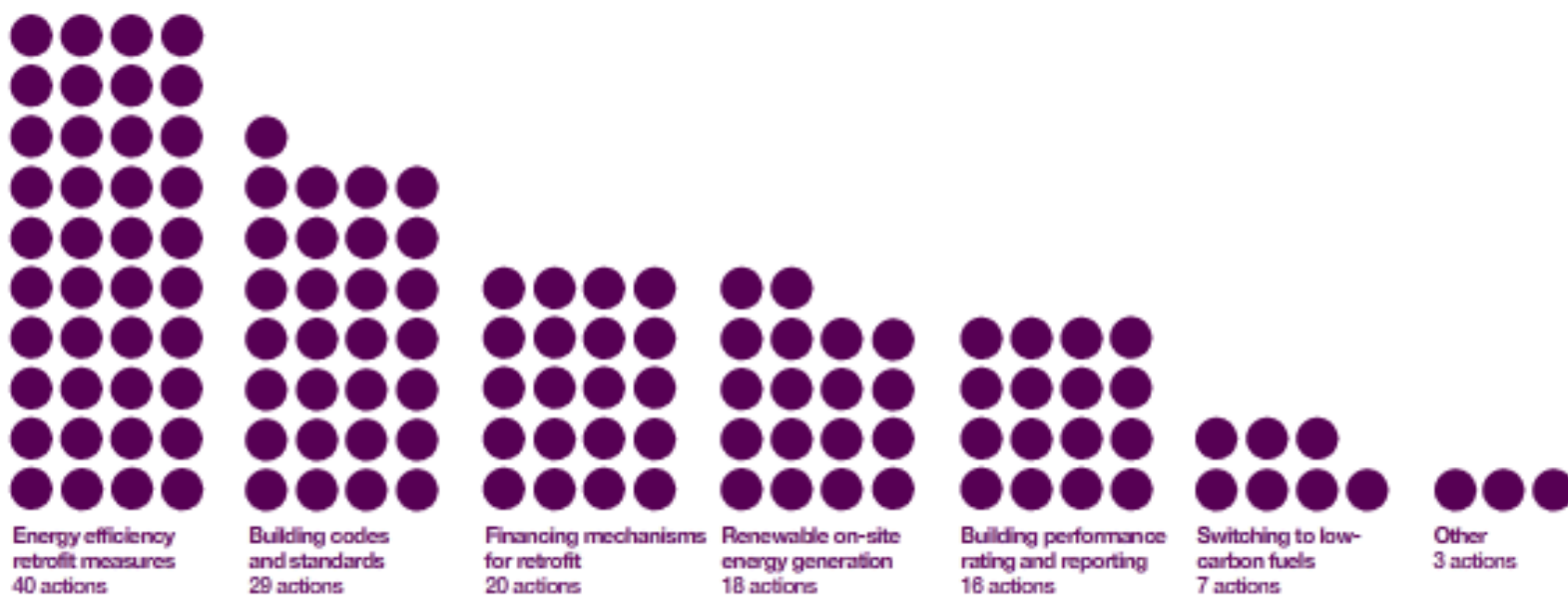


Click each section to discover what actions cities are taking



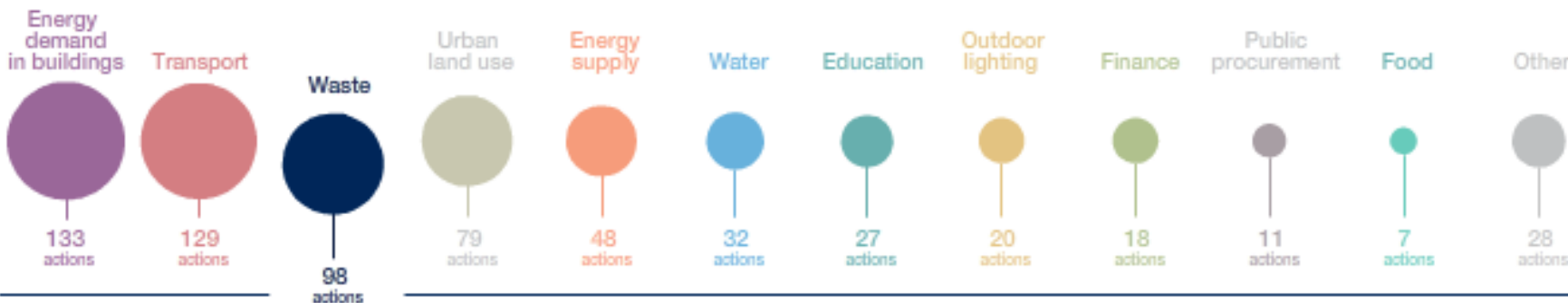


Cities report 133 actions to reduce energy demand in buildings:



[Download the report](#)

Cities Emissions Reporting Risks + Adaptation Emissions Reductions Opportunities Water



Cities report 98 actions



Recycling or composting collections and/or facilities

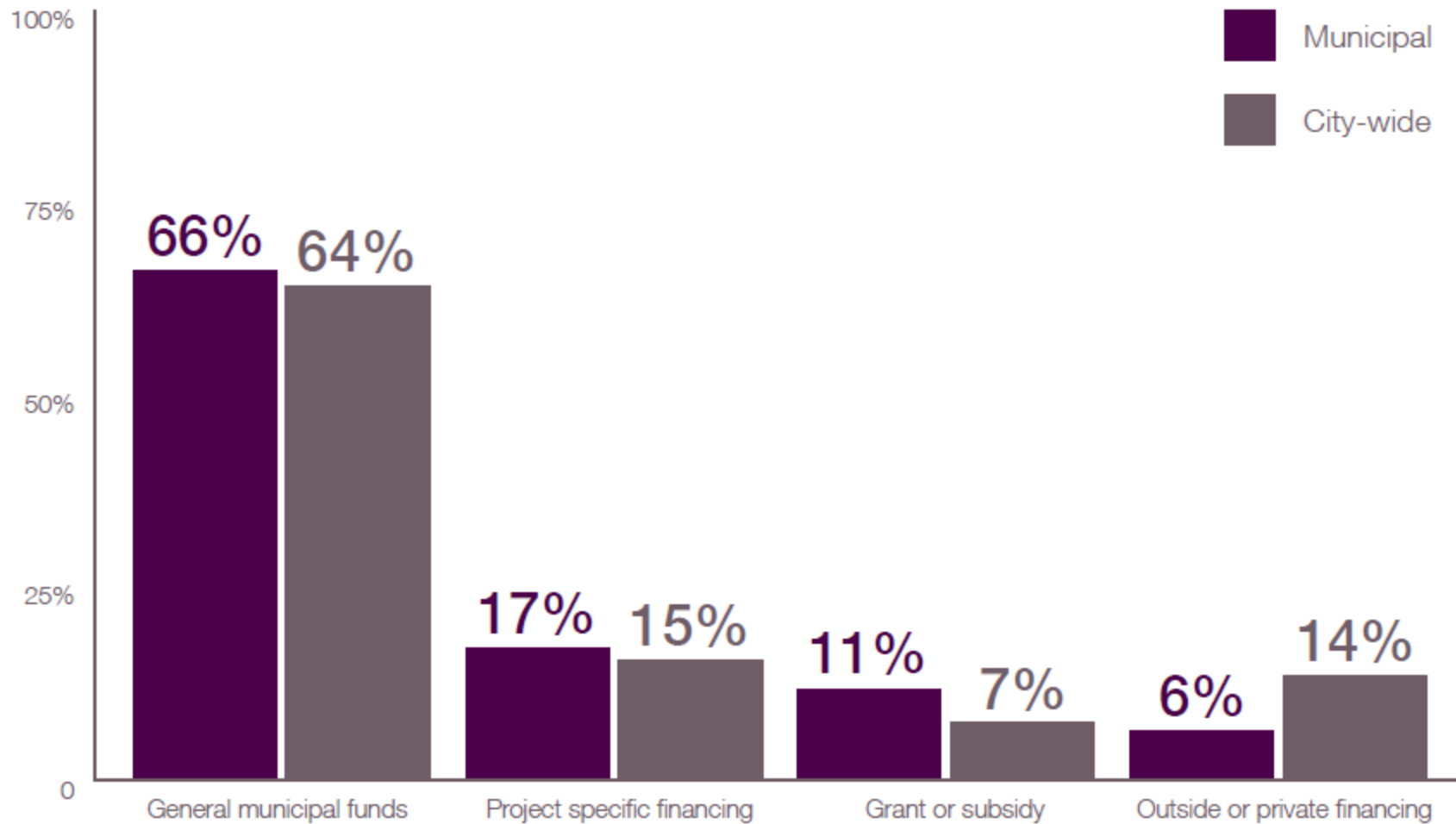
Houston launched a mandatory yard waste composting program in April 2010 and has diverted 60,000 tons of yard waste in the last year, with disposal savings of \$2 million. The City has also deployed single stream recycling to one-third of single-family households and is working on full deployment.

San Francisco is pursuing a goal of zero waste to landfill by 2020, with the primary strategy of maximum source separation of recyclables and compostables for highest and best use. To help move toward the cities zero waste goal, in 2009 the Board of Supervisors passed the Mandatory Recycling and Composting Ordinance. This required organic collection be provided to all residences, apartment buildings, commercial businesses, city facilities and public events. This has had a noticeable impact in increasing diversion, for example the amount of compostables collected for composting increased from 400 Tons Per Day (TPD) prior to 600 TPD in 2 years since the passage of the mandatory ordinance.

Other actions:



Funding Emissions Reduction Actions



Funding Emissions Reduction Actions

Basel

“For over 20 years, the canton of Basel-Stadt has had a special source of financial revenue in the form of the incentive levy. Since 1984, an additional charge of about five percent has been made on all electricity bills in the canton. This money is put towards renovating buildings and promoting renewable energy sources for buildings which are located in the Canton Basel-Stadt.”



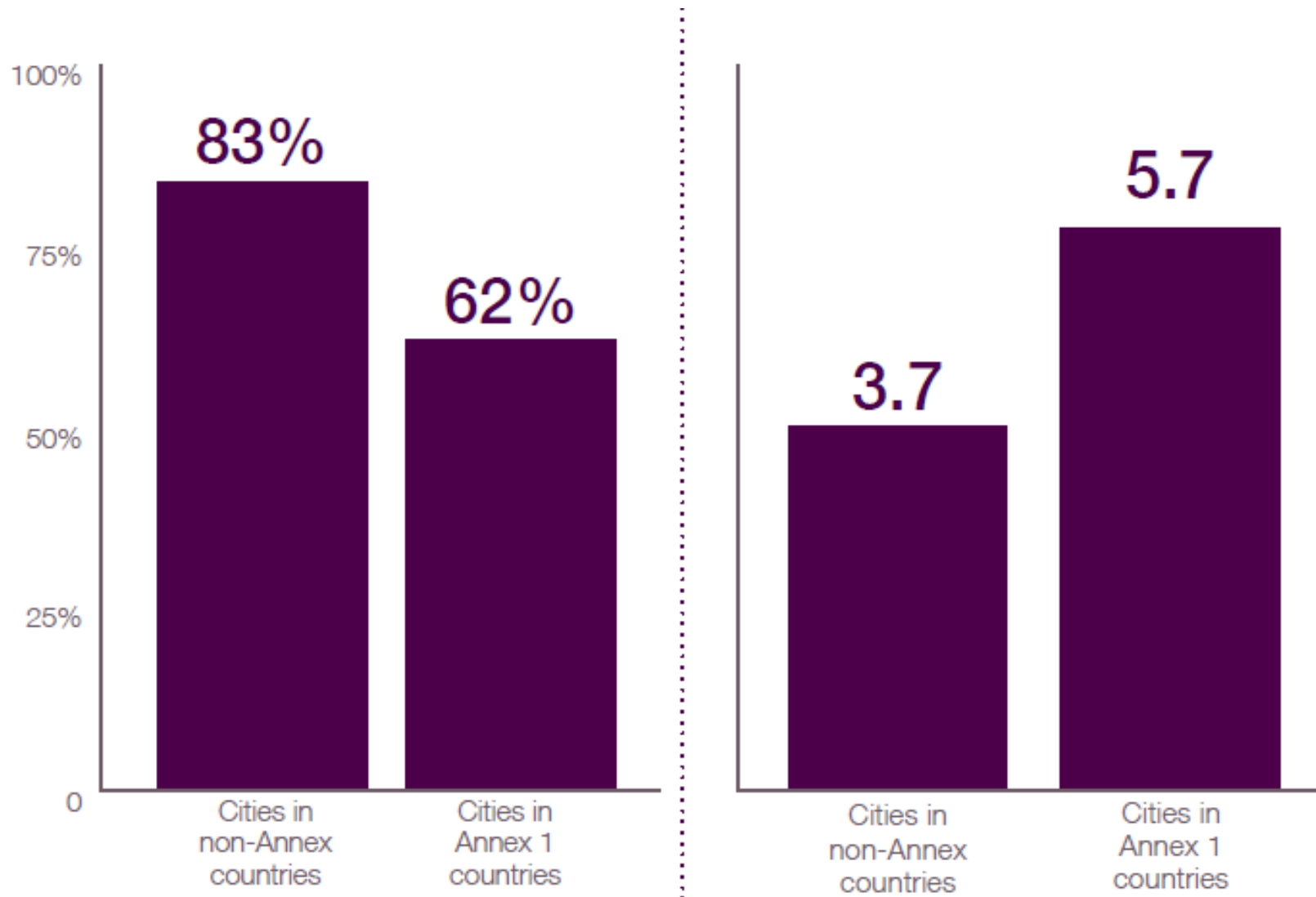
Greater London

“The Mayor has used EU funding to create the London Green Fund, a revolving fund which will finance decentralised energy and energy efficiency projects. £100 million available to support energy efficiency and supply projects in public sector buildings. See www.leef.co.uk.”

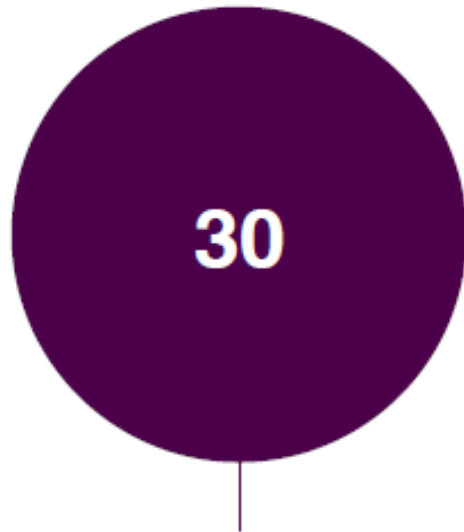


Adaptation

Cities with adaptation plans : Av. No. of adaptation actions



How are cities adapting to risks from temperature increase / heat waves?



Initiatives for tree planting and/or creation of green spaces



Green roof programs



Community engagement and education programs

How are cities adapting to risks from drought?



Risks reported

Adapting to risks

Click each risk family to discover how cities are adapting.

Drought

Frequent / intense rainfall

Sea-level rise

Storms / floods

Temperature increase / heat



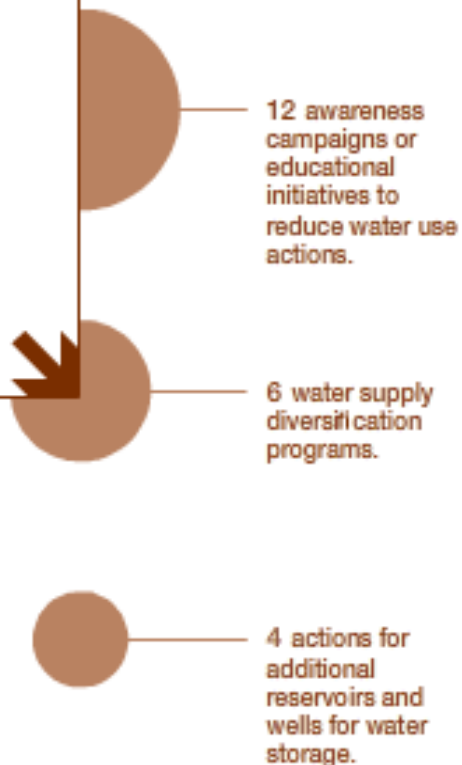
36 cities (49%)
are reporting drought

What cities are doing:

Las Vegas is currently funding water supply initiatives, including the construction of the third intake at Lake Mead and the Eastern Nevada Groundwater-pipeline project. The city has also pursued other surface and groundwater rights and has considered desalination in the past.

Denver is converting many of its parks to be able to use reuse (recycled) water for irrigation and lakes water supply.

How are cities adapting to risks from drought?



12 awareness campaigns or educational initiatives to reduce water use actions.

6 water supply diversification programs.

4 actions for additional reservoirs and wells for water storage.

C40 Cities – cool stuff



“Copenhagen has an ambition of becoming the world’s first carbon neutral capital and the city has a goal of using this as a catalyst for ‘Green Growth’, focusing on green energy, green transportation and green construction. With more than 400 cleantech companies in the metropolitan area, Copenhagen is in pole position in the global clean tech race.”

Copenhagen

C40 Cities – cool stuff



“Berlin’s Solar Atlas shows precisely whether a roof is suitable for using solar energy and whether the investment will pay off. Possible electricity generation, CO₂ savings and investment costs are displayed in a single overview. To prepare this Solar Atlas, all of the approximately 500,000 roofs in the city were laser measured from an aircraft.”

Berlin

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[https://www.cdproject.net/
CDPResults/CDP-Cities-2012-
Global-Report.pdf](https://www.cdproject.net/CDPResults/CDP-Cities-2012-Global-Report.pdf)

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