

The reality behind Europe's response to climate change

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British cities – unlike their counterparts on the mainland - are taking the lead in making plans to curb and handle the impact of climate change. So says Diana Reckien, of Columbia University in the US, in a study published in Springer's journal *Climatic Change* that analysed the relevant strategic policies and planning documents of 200 urban areas in eleven European countries. They found that one in every three European cities has no plans on the table to reduce greenhouse gas emissions, while seven in every ten urban areas have no formal adaptation plans in place.

How cities respond to climate change is important as they are

responsible for 31 to 80 percent of global [greenhouse gas](#) emissions. Cities are particularly vulnerable to climate hazards due to their high density of people, their assets and infrastructure. On the other hand, such [urban areas](#) are unencumbered by the complicated international negotiations that hamper climate change action at the international level.

Reckien's team, funded by the European Science Foundation COST Action TU0902, studied the response to climate change issues of 200 large and medium-sized cities in eleven European countries. Their analysis is the first to look objectively at strategic policy and planning documents rather than relying on self-reported measures such as questionnaires and interviews of city representatives. They scrutinized adaptation plans which incorporate urban planning and development actions that lead to the abatement or reduction of vulnerability to climate change, and mitigation plans that include actions such as improved energy efficiency and renewable energy generation to reduce greenhouse gas emissions.

Overall, 130 cities (65 percent) have at least a mitigation plan, and less than a third (28 percent) also an adaptation plan. More than one in every three cities (35 percent) has no plan whatsoever in place. Only one in every four cities (25 percent) had both, and also set quantitative targets to reduce greenhouse gas emissions. Most (88 percent) mitigation plans quantify targets for carbon dioxide or [greenhouse gas emission](#) reduction.

Countries vary in their planning: 93 percent of UK cities studied have a mitigation plan whereas only 43 percent of French and 42 percent of Belgian cities do. The highest proportion of cities with an adaptation plan are in the UK (80 percent of 30 cities), Finland (50 percent of 4 cities) and Germany (33 percent of 40 cities). Dutch cities are the most ambitious aiming to be 'carbon-', 'climate-' or 'energy-neutral' (100 percent reduction target) by 2050 or earlier.

If the planned actions within cities are nationally representative, the European Union would achieve its 20 percent reduction target, but fall short of the 80 percent emission reduction recommended to the avoid global mean temperature rising by more than 2°C.

"To better understand the global [climate change](#) response and emissions reduction actions, we recommend the establishment of an international database of mitigation and adaptation options that builds upon this European study," writes Reckien.

More information: Reckien, D. et al (2013). Climate change response in Europe: What's the reality? Analysis of adaptation and mitigation plans from 200 urban areas in 11 countries, Climatic Change [DOI: 10.1007/s10584-013-0989-8](#)

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