

ARE WE ON THE RIGHT TRACK? THIS IS WHAT WE FOUND WHEN RE-VIEWING CLIMATE POLICIES IN 885 EUROPEAN CITIES

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Introduction

Cities are in the global race to cut greenhouse gas emissions as quickly as possible, and to simultaneously adapt to the impacts of climate change. This is no easy task, but the first step is for cities to put plans in place to take action to support the [Paris Agreement](#), that is, to limit mean temperature rise to below 2 degrees Celsius above pre-industrial levels. In Europe, cities account for [60-80% of carbon emissions](#), with approx. 74% of the population living in them.

As challenging as it appears, this should be seen as an opportunity, too. Carbon emission reduction at the urban scale contributes to mitigating climate change. Very likely, it will help to reduce local pollution and increase resource-use efficiency. Win-win strategies for adaptation are easy to foster, too: green and blue infrastructures, nature-based solutions, are actually one of the most popular options to support cities to adapt to hotter summers and colder winters, and to reduce the impacts of extreme events, such as extreme rainfalls and coastal events. Moreover, they help to increase urban environmental quality and well-being. For these reasons, planning for climate change should be seen as a key priority for cities, and it is important to track advances in this regard.

[Our study](#) (Reckien et al., 2018) is the most comprehensive survey to date investigating the progress made by cities in planning mitigation and adaptation actions. We have investigated the availability and content of Local Climate Plans in

885 European cities from EU-28 member states. This is the result of the collaboration of 30 researchers across Europe, in addition to support from the European Environment Agency (EEA) and many European national governments. Led by Diana Reckien from the University of Twente, this network of researchers was born in 2010, thanks to the funds of the European Commission through the COST Action TU0902. Our work is based on two previous studies that analysed the [content](#) and [influencing factors](#) for climate plans in 200 cities in Europe. The 885-city inventory that we are presenting now provides a larger and more ambitious picture of where EU cities stand in terms of mitigating and adapting to climate change.

[The good news](#) is that 66% of EU cities have a mitigation or adaptation plan in place. The top countries for cities with mitigation plans were Poland 97%, Germany 81%, Ireland 80%, Finland 78% and Sweden 77%. For adaptation, Finland led the way with 78% of cities having a plan.

[Should we make urban climate plans mandatory?](#)

We found that countries that make Local Climate Plans (LCPs) compulsory are a minority in the EU. However, the existence of national regulation has a significant

Highlights:

- **We analyse Local Climate Plans (LCPs) for 885 Urban Audit cities from all 28 European member states.**
- **Approximately 66%, 26% and 17% of cities, respectively, have mitigation, adaptation or joint plans.**
- **Approximately 80% of cities with >500,000 inhabitants have mitigation and/or adaptation plans.**
- **There is great diversity across the EU-28, with more plans in central & northern Europe.**
- **Only a few countries in the European Union (EU) make LCPs compulsory.**

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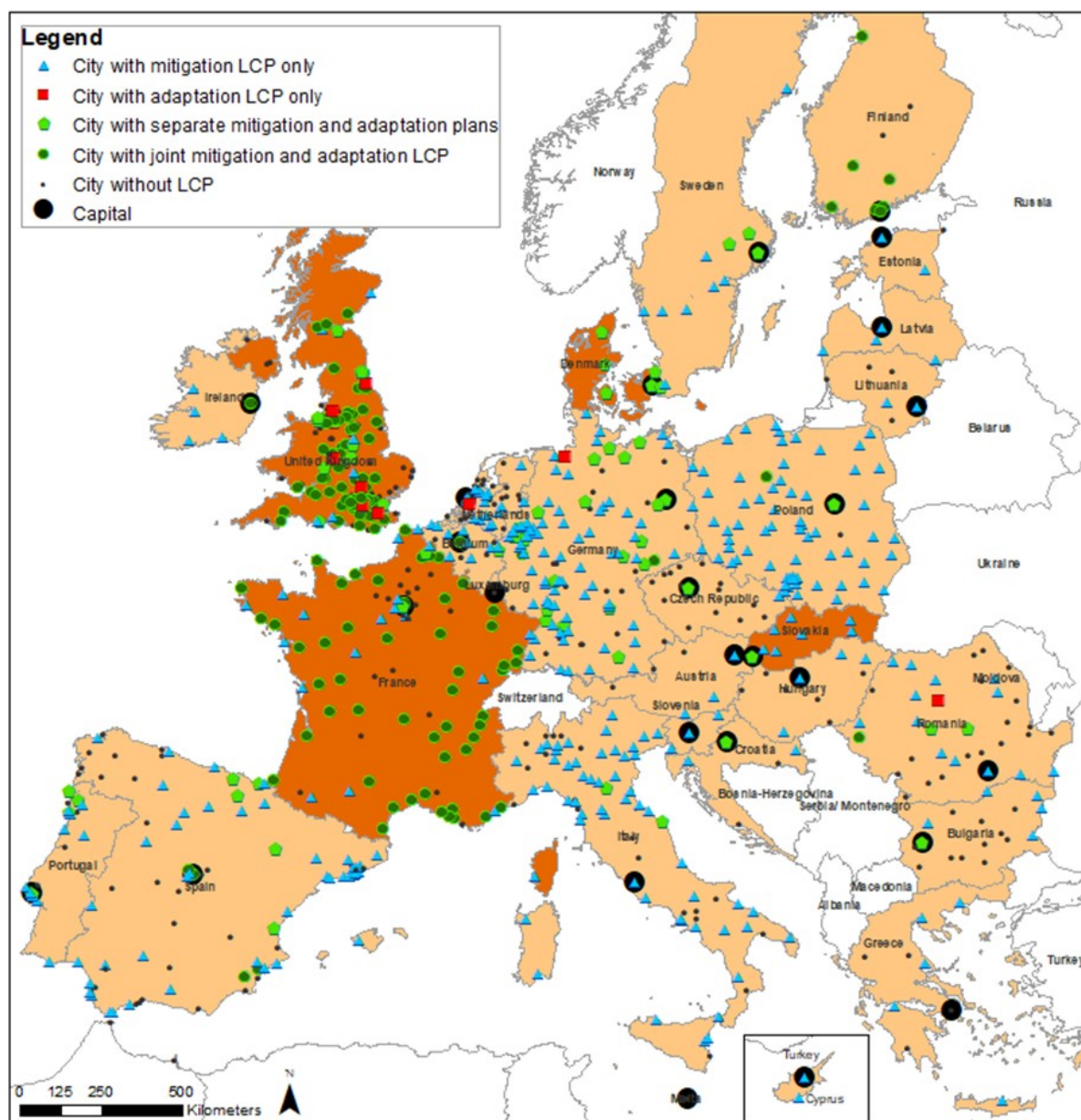


Fig. 1. Stand-alone plans in the EU. Source: Reckien et al. (2018)

impact on local climate planning. Denmark, France, Slovakia and the UK make it law for cities to develop LCPs, often connected with guidance on how to develop the content of the plans. Compared to the rest of Europe, in these countries, cities are nearly twice as likely to have a mitigation plan, and five times as likely to have an adaptation plan. Based on these numbers, we conclude that national legislation is an important booster for the development of local climate action plans.

Throughout the EU, mainly large cities have LCPs. Fig. 2 shows how the stand-alone LCPs in countries without national legislation requiring the development of LCPs are distributed across city size. We define stand-alone LCPs as those that have been developed by an urban authority/ administration, and that comprehensively (multiple sectors) address climate change. The plan should not rely on support from international networks or funding agencies, and is described in a stand-alone document. We observe that the proportion of cities with a stand-alone mitigation plan and/or a stand-alone adaptation plan increases in line with their size.

There are shortcomings worth noting. 33% of EU cities (288 cities) do not have any stand-alone climate plan whatsoever, such as Athens (Greece), Salzburg (Austria), and Palma de Mallorca (Spain). Not a single city in Bulgaria

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and Hungary had a stand-alone climate plan. Only 16% (144 cities) have joint-up mitigation and adaptation plans; for example, cities such as Brussels (Belgium), Helsinki (Finland), Bonn (Germany), London (UK) and Lyon (France). However, these data need to be handled with care, as we found that almost all these plans (87.0%) were done by cities in France and the UK, the latter leading the way with 79 cities with joint-up plans.

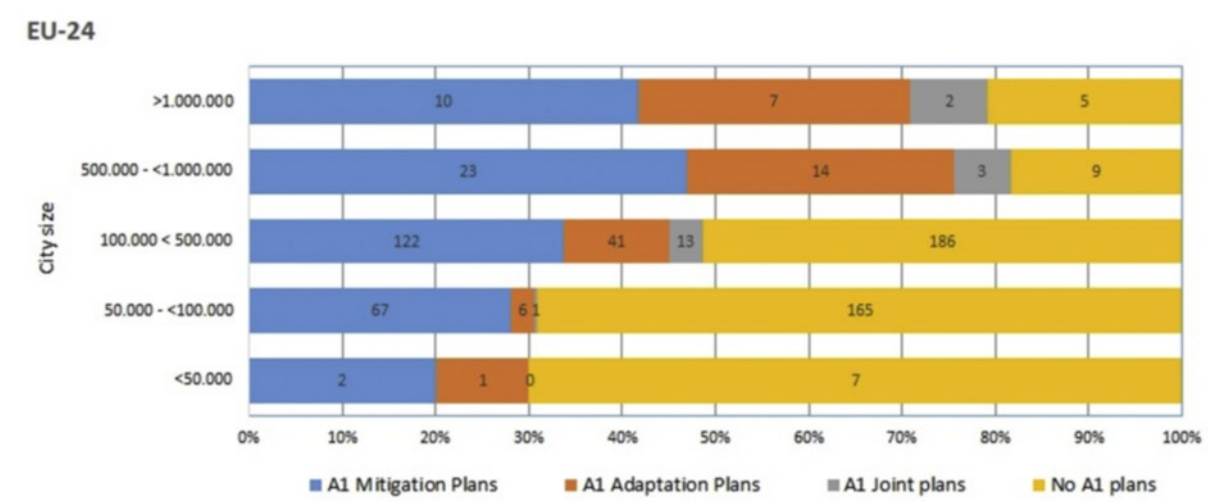


Fig. 2. Availability of stand-alone plans through city size. Source: Reckien et al. (2018)

Pioneering cities

Some cities in the Netherlands and the UK have climate actions mainstreamed in their planning activities, often aiming for broader environmental goals, such as resilience and sustainability. These cities are forward-looking and have their climate activities covered under sustainability and resilience plans. They do not have stand-alone climate change mitigation or adaptation plans, per se. This is, for example, the case for Rotterdam and Gouda in the Netherlands. A similar development can be observed in the UK—climate issues are often integrated into broader development goals, and then addressed in the Core Strategy, Master/Development plan and Sustainability plan. Examples are Norwich, Swansea, Plymouth and Doncaster.

The power of networking

Most cities in Spain (60.6%) and Italy (76.3%) do not have stand-alone plans. On the contrary, they have plans developed under the framework of international networks such as the Covenant of Mayors for Energy and Climate. [Previous work](#) by the authors investigates [these cases](#) in further depth and concludes that the lack of regional and national guidance might be one of the most influential factors for cities looking for external support. Other countries with cities developing their LCPs under the umbrella of international networks include Cyprus, Denmark, Slovenia, Latvia (100.0% of UA cities), Finland (88.9%), Belgium (81.8%), Ireland (80.0%), Sweden (76.9%), Estonia (66.7%), Portugal (64.0%) and Romania (62.9%).

Networking provides immense benefits for cities and cannot be underestimated. There is simply too much at stake for the world's cities to go their separate ways when it comes to climate change, and this is no different for the EU. We have found that international climate networks make a difference for countries and cities when it comes to developing and implementing climate plans. In our sample, 333 EU cities are signatories of the Covenant of Mayors encouraging cities to engage in climate planning and action. Overall, the EU Covenant of Mayors has five times as many signatories as the UN Compact of Mayors. No country has a significant number of members of Mayors Adapt.

Our study shows that cities are taking climate change threats seriously, and whilst EU member states are taking important steps to reduce emissions and adapt their cities to the changing climate, there is clearly more work to be done.

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It is a near certainty that if cities do not plan and act now to address climate change they could find themselves in a far more precarious position in the near and long-term future. National governments have a leading role in this, providing legal and regulatory frameworks and guidance. As our findings show, this has proven to be useful and one of the most effective ways to build coherency and ensure that cities and their populations are prepared for the threats and opportunities that climate change brings. The full study is available for download [HERE](#).

REFERENCES

Reckien, D., Salvia, M., Heidrich, O., Church, J.M., Pietrapertosa, F., De Gregorio-Hurtado, S., D'Alonzo, V., Foley, A., Simoes, S.G., Krkoška Lorencová, E., Orru, H., Orru, K., Wejs, A., Flacke, J., Olazabal, M., Geneletti, D., Feliu, E., Vasilie, S., Nador, C., Krook-Riekkola, A., Matosović, M., Fokaides, P.A., Ioannou, B.I., Flamos, A., Spyridaki, N.-A., Balzan, M.V., Fülöp, O., Paspaldzhiev, I., Grafakos, S., Dawson, R., 2018. How are cities planning to respond to climate change? Assessment of local climate plans from 885 cities in the EU-28. *Journal of Cleaner Production* 191, 207–219. <https://doi.org/10.1016/j.jclepro.2018.03.220>