# Cities at the forefront of climate action

ACHIEVING THE PARIS CLIMATE GOALS THROUGH THE EFFORT SHARING REGULATION

Policy Briefing, October 2017

## Executive summary

Cities and regions are critically important for meeting and overachieving Europe's climate targets. More than a third of the EU's 2020 climate target will be delivered by cities, equivalent to 240 million tonnes of $CO_2$ emission reductions (JRC, 2016).

The numerous co-benefits of climate and energy measures have motivated thousands of local and regional authorities across Europe to take ambitious actions in the building and transport sectors. These local actions have led to more livable cities with less noise and air pollution, more comfortable, affordable and healthier homes and a better quality of life for millions of urban residents.

The EU is currently finalising the implementation of its 2030 climate and energy framework, including a legislative proposal for the Effort Sharing Regulation (ESR) for the 2021-2030 period. The Effort Sharing Regulation sets national climate targets for the transport, building, agriculture and waste sectors and is a centerpiece of Europe's efforts to implement the Paris climate goals.

A strong Effort Sharing Regulation - without loopholes - can support and incentivise the uptake, replication and up-scaling of local climate and energy actions. However, many countries are eroding this potential by introducing regulatory loopholes in the climate law which - if adopted - would put the delivery of Europe's climate commitment at risk and stifle climate efforts undertaken by cities and regions.

The national push for these loopholes in the EU's key climate law hence goes against the interest of the local actors in these countries (and their citizens). The national governments of Spain and Italy are at the bottom of the *EU Climate Leader Board* that evaluated their stance on the ESR, for example. However, their view is not held by the thousands of municipalities in these two countries, representing over 24% of the Italian population and 16% of the Spanish population that are working to accelerate the low-carbon transition under the EU Covenant of Mayors.

The local good practice examples highlighted in this briefing point to the impressive mitigation potential in cities. Unlocking this potential will allow the EU and its Member States to enhance Europe's climate ambition and improve the living conditions for the millions of their city inhabitants.

### Key recommendations

- **Increase Europe's climate ambition to reach the Paris climate goals and propel local climate efforts**
- **Close the loopholes in the Effort Sharing Regulation and start from an accurate baseline to unlock the myriad local co-benefits of taking climate action**
- **Ensure a better coordination between national and local governments, inter alia in the positioning on key EU climate and energy files**
- **Recognise and scale up local good climate practices in the 2030 national energy and climate plans**

## Introduction

The EU is currently deciding on its key climate law to implement the Paris climate goals, the Effort Sharing Regulation (ESR), that covers the lion's share of Europe's greenhouse gas emissions in the post-2020 period. In June 2017, the European Parliament adopted its position on this climate legislation, and final negotiations involving the three EU institutions will start once the Environment Council has reached an agreement on the file. This policy briefing examines the contribution that cities can play in the EU's low-carbon transition, highlights local climate projects from Italy, Poland and Spain and provides recommendations on how the ESR can unlock and scale up such local good practices.

## The Effort Sharing Regulation – Europe's largest climate tool

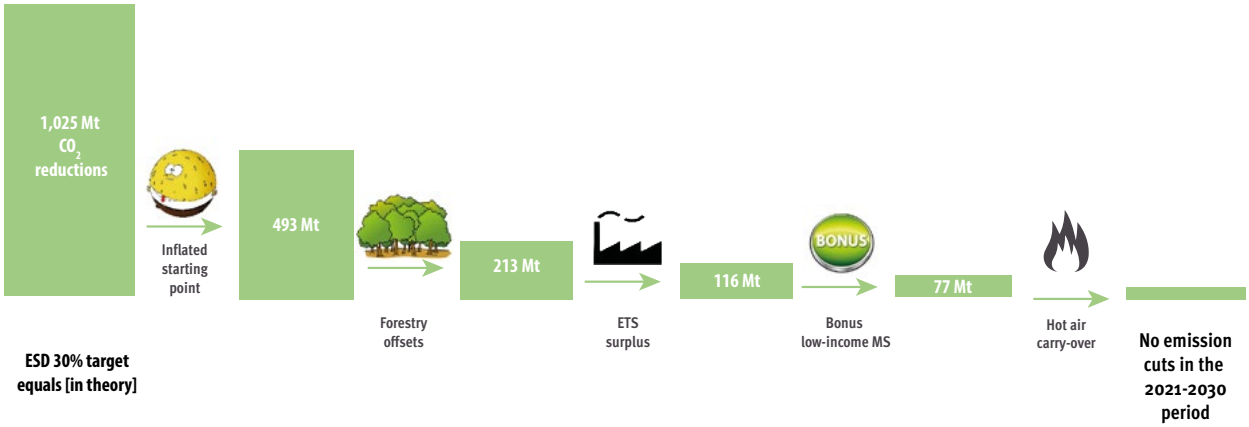
In the Paris Agreement, countries have committed to taking action on climate change, in order to limit global warming to well below 2°C and pursue efforts to limit the temperature rise to 1.5°C. The Effort Sharing Regulation, covering the majority of Europe's total emissions in the post-2020 period, is Europe's largest climate tool to implement the Paris Agreement.

The Effort Sharing Regulation sets binding national emission reduction targets for the 2021-2030 period for sectors not covered by the EU Emissions Trading System (EU ETS), namely: transport, buildings, agriculture and waste.

## The impact of loopholes on the Effort Sharing Regulation

In theory, the Effort Sharing Regulation is expected to deliver emission cuts equal to around 1,000 million tonnes of $CO_2$ compared to already adopted EU and national measures. This potential is however at risk of being eroded by several regulatory loopholes which -if adopted- would mean that no further climate action is needed in the 2021-2030 period. The loopholes that are pushed for by countries include starting from a misleading baseline, abusing forestry offsets, exploiting the huge surplus under the EU ETS or carrying over hot air from the period up to 2020. These loopholes do not only put the delivery of Europe's climate commitment at risk but could also stifle the climate actions undertaken by cities and regions.

**Impact of loopholes on the EU's climate efforts in the non -ETS sectors**



## The contribution of cities and regions to Europe's climate action

Local and regional authorities are of critical importance in mitigating climate change and adapting to its unavoidable effects. Around 80% of the population lives and works in cities and over half of the total greenhouse gas emissions are created in and by cities. Local and regional authorities are also key actors in Europe's clean energy transformation: it is in cities that the bulk of electro-mobility will be deployed, where new energy technologies can foster the decentralisation of the energy system and where a renovated building stock can drive down emissions significantly.

The 7,500+ signatory cities of the Covenant of Mayors for Climate & Energy have a crucial role to play in supporting the EU in achieving its energy and climate objectives. They have already developed over 6,000 local energy and climate action plans (SECAPs), in which they voluntarily commit to fulfill European climate and energy targets by reducing their GHG emissions through energy efficiency and renewable energy measures.

**Over a third of the EU's 2020 emission reduction target will be delivered by cities (JRC, 2016)**

The actions by EU Covenant signatories - representing about a third of the EU's population - will deliver at least one third of the EU's 2020 climate target, equivalent to 239 million tonnes of $CO_2$ emission reductions (JRC, 2016). Most of these urban emission cuts are achieved in the building and transport sectors, through a combination of policies such as public procurement, building standards, awareness-raising, financial incentives to promote efficiency and renewable energy, and local mobility plans (i.e. low-emission zones, improved public transport). Additionally, EU Covenant cities are engaging in efforts to reduce their emissions in the areas of waste, agriculture and forestry.

Cities thereby directly support the implementation of the Effort Sharing legislation and contribute towards Europe's climate targets.

## The numerous co-benefits of taking climate action

Being the closest administration to citizens, the evident co-benefits of undertaking climate and energy measures has driven thousands of local and regional authorities across Europe to take ambitious actions in transport, agriculture, building and waste sectors. These local actions have led to more livable cities with less noise and air pollution, more comfortable, affordable and healthier homes and the creation of jobs in the construction sector that was particularly hard hit by the economic crisis.

In the six most 'energy vulnerable' EU countries, which depend on Russia as the single external supplier for their gas imports, hundreds of Covenant of Mayors cities have moreover adopted action plans that identify a series of measures to change the use and sourcing of energy in order to improve self-sufficiency and reduce emissions. The implementation of these energy measures could save up to 58% of natural gas consumption (JRC, 2014), enabling Member States to reduce energy imports, increase energy security and invest the freed-up funds into new mitigation projects.

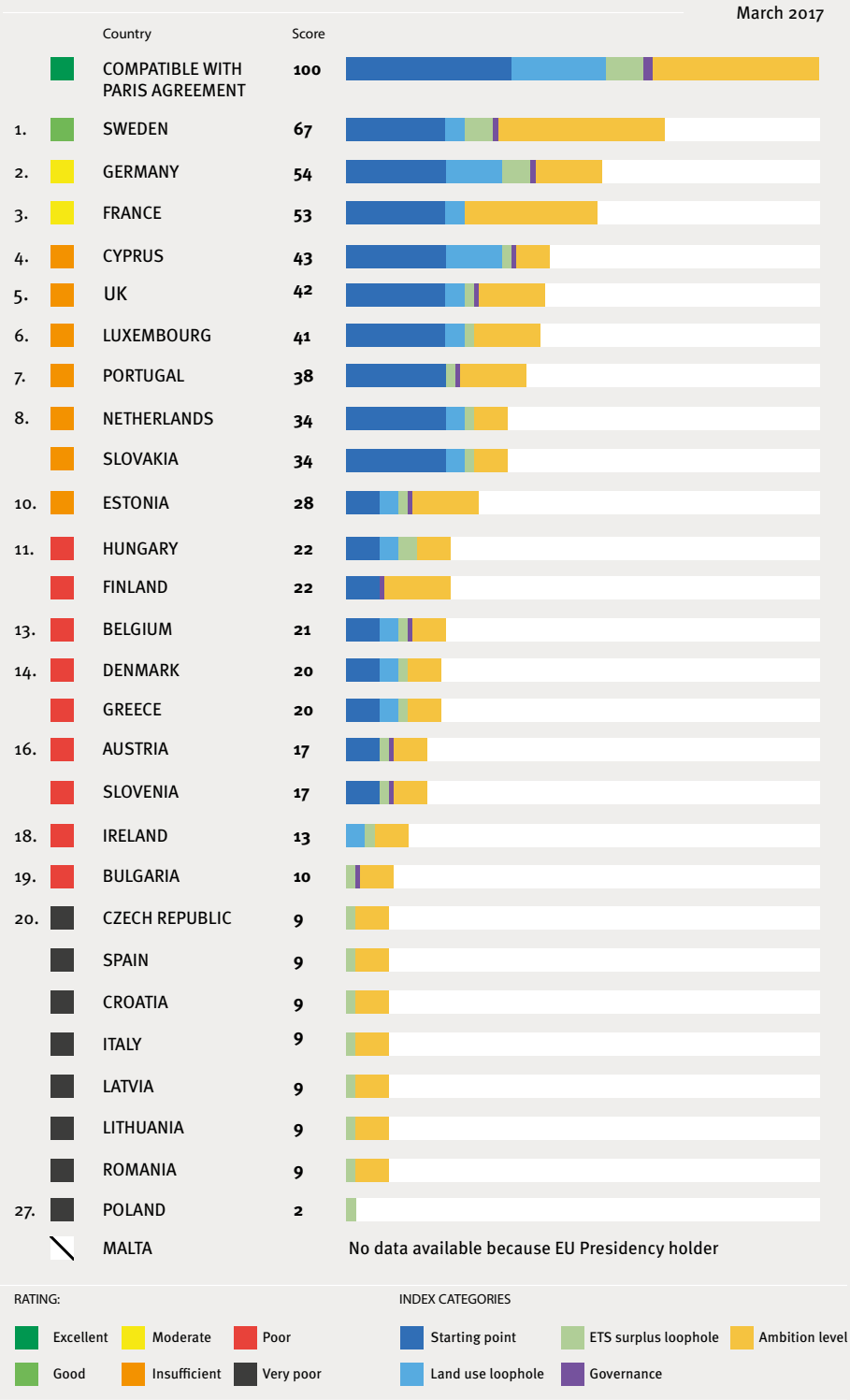
## Scaling up local action to enhance Europe's climate ambition

The contribution of cities and regions in reaching the European climate and energy targets is already significant. Yet, much more is possible with an enabling, stable and ambitious policy framework and effective access to financing. A strong Effort Sharing Regulation - without loopholes - can support and incentivise the uptake, replication and upscaling of local climate and energy actions. Creating the right conditions to enable climate efforts to propel will moreover lead to numerous co-benefits and a better quality of life for the millions of urban residents.

# Where countries and cities stand on Europe's largest climate tool

## EU Climate Leader Board

Where countries stand on the Effort Sharing Regulation - Europe's largest climate tool




**The ranking is based on a system of points for the different elements of the proposal which are weighted against their importance. The countries' positions come from public documents, declarations by ministries and papers submitted to the Working Party on Environment. No country is doing enough to make the Effort SharingRegulation compatible with the Paris Agreement.*

The EU Climate Leader Board (CMW/T&E, 2017) shows the position of each national government towards the EU's largest climate law - the Effort Sharing Regulation. Sweden tops the list, although it still falls short of being compatible with the Paris Agreement. At the other end, Poland, Italy and Spain push to introduce more loopholes in the climate law, countering Europe's efforts to comply with the Paris climate goals.

A similar ranking of cities rather than countries would show a different picture. Italian municipalities representing 24% of the Italian population are implementing an absolute majority (55%) of the local climate plans under the EU Covenant of Mayors, for example. Moreover, around 16% of the Spanish population lives in cities that are working to accelerate the low-carbon transition and are responsible for over 26% of the submitted local climate plans in the EU.

The unconstructive positioning of these EU countries hence do not seem representative of the view of their local and regional administrations (and their citizens).

The below local good practice examples from Spain, Poland and Italy show a great mitigation potential in these countries. Unlocking this potential allows the EU and its Member States to enhance climate ambition and maximise on the multiple co-benefits of climate actions - such as green urban habitats, improved air quality, reduced energy poverty and cleaner and safer streets.

## Local good practice examples - Spain

### Barcelona - Lively and sustainable streets in Superblocks

The Catalan capital and Covenant city has committed to reduce its CO2 emissions by at least 40% by 2030, particularly through actions in the transport sector that accounts for almost a third of Barcelona's CO2 emissions. Through its "Superblocks" programme, kicked off in 2014, Barcelona is significantly reducing the carbon footprint of its transport sector by keeping car traffic on the outskirts of each block (which is a unit bigger than one street block but smaller than a neighbourhood). This frees up space for citizens to use more sustainable forms of mobility like walking or cycling and for green areas to create habitats that encourage biodiversity, improve air quality and reduce the urban heat island effect.

Barcelona's Superblocks programme first began in the Gracià district, and is progressively being extended to other parts of the city. In Barcelona, the Superblocks approach will enable the city to save 159,100 tons of CO2 annually, and provide to 95% of its residents access to a bicycle lane within only 300 metres of their home. A total of 300 km of bicycle lanes is being built, boosting the number of bikes on Barcelona's streets while progressively reducing the amount of vehicles. Barcelona itself is investing over €10 million from its municipal budget in the Superblocks programme for the period 2017-2020.

### Gijón - Renovation programme for public infrastructure

The economic powerhouse of the Asturias region and Covenant of Mayors signatory aims to cut its $CO_2$ emissions by at least 35% by 2020, compared to 2007, by launching a €20 million investment programme in renovation works.

With the support of the European Energy Efficiency Fund (EEEF), the Spanish city will undertake energy audits for 98 public buildings and 40,000 street lighting points, and identify suitable energy efficiency and renewable energy measures to cut energy consumption and emissions. Gijón will work with an energy service company (ESCO) in order to realise the foreseen actions within merely two years.

*Gijón aims to cut its emissions by at least 35% by 2020 and is launching a €20 million investment programme to renovate public infrastructure. ©Doug Manson*

## Local good practice examples - Poland

### Niepolomice - Boosting solar energy in public and residential buildings

The small town of Niepolomice was one of the first Polish cities to join the Covenant of Mayors in 2009. This South-Eastern Polish municipality is bidding on renewable energy to achieve its objective of reducing its CO2 emissions by 25% by 2020, compared to 2008. Niepolomice set up a partnership with three other municipalities - Miechow, Skawina and Wieliczka - to jointly purchase and install renewable energy installations for their households and public buildings.

While citizens were skeptical about the benefits of this project at first (notably as regards cost and efficiency), Niepolomice and its three partnering municipalities succeeded in persuading citizens to co-invest in the renewable energy systems for their homes. Citizens accounted for 75% of payments in the joint public procurement scheme of the four Polish municipalities. Overall, €17,3 million was invested in four years (2012-2015) to equip 3,841 households and 32 public

buildings with renewable energy sources, ranging from solar panels and solar thermal collectors to heat pumps.

At least 1,400 citizens from Niepolomice and its partnering municipalities moreover participated in training programs to install solar infrastructure in their homes. This commitment to solar energy in Niepolomice shows that viable and economically attractive alternatives to coal exist, to secure a clean energy supply of public and residential buildings in Poland.

### Gdynia - Poland's most energy efficient city

Gdynia has been designated as Poland's most energy efficient city. This Covenant of Mayors signatory's has adopted a successful coherent approach to energy efficiency - from waste and mobility to street lighting.

Gdynia's waste-to-energy plant, which serves 460,000 people, ensures that (literally) nothing goes to waste by producing biogas and biofuel from biodegradable waste. The city plans to equip half of its bus fleet with this biofuel by 2030, thereby improving air quality and keeping ticket prices low for citizens. Gdynia has also decreased the power consumption of its bus fleet by over 20% in just two years, thanks to the retrofitting of old diesel buses into energy efficient trolleybuses. The Polish municipality has also replaced half of its street lamps with more energy efficient alternatives (e.g. LED), resulting in significant cost reductions. The saved funds were reinvested by Gdynia into improving the quality of the public lighting system, thereby making citizens feel safer as more efficient light posts illuminate the city at night.

*Half of Gdynia's bus fleet will be running on biogas from the city's waste-to-energy plant by 2030, reducing emissions and improving air quality. ©axe*

## Local good practice examples - Italy

### Salerno - The city with the highest recycling rate in Italy

In this Southern Italian Covenant of Mayors city, the commitment to circular economy is translated into concrete action. Salerno recycles over 70% of its solid waste, making it a recycling champion across Italy. Through a proactive, strong campaign to inform and raise awareness of its citizens of the benefits of preserving the quality of Salerno's environment, the local authority has succeeded in leveraging broad support and commitment for recycling among local stakeholders and citizens over the past seven years.

Furthermore, Salerno has completed the waste cycle through the construction of a composting plant -with a capacity of 30,000 tons of organic waste each year- in order to obtain energy recovery and transform organic waste into high-quality compost for agriculture. The plant enables Salerno to cut its $CO_2$ emissions yearly by over 24,000 tons and reduce its dependence on landfilling (a serious environmental problem in Southern Italy). Salerno's plant can produce biogas from biowaste, which can generate heat and electricity in a combined heat and power (CHP) plant.

*A new composting plant has allowed the Southern Italian city of Salerno to reduce its $CO_2$ emissions by 24,000 tons per year. © canadastock-shutterstock*

## Parma - Providing favourable loans to citizens to retrofit their homes

In the Northern Italian city and Covenant of Mayors signatory Parma, the housing stock is responsible for more than 32% of the city's $CO_2$ emissions. In its climate plan, Parma has decided to focus on residential buildings, responsible for the majority of the building stock's emissions. Parma aims to renovate 1,000 condominiums (multi-family buildings) by 2020, which could enable the city to avoid 4,500 tons of $CO_2$ emissions per year. As a second step, the focus will be on single family houses and apartments.

In order to implement its retrofitting plan, Parma established the Parma Energy Agency to give free technical and financial advice to citizens and help them in preparing the retrofitting work. It has moreover teamed up with the local bank Cassa di Risparmio di Parma e Piacenza to issue favourable loans at an interest rate of 2,9% to citizens to enable them to finance the renovation of their homes (i.e. thermal insulation, replacement of heating systems or installation of renewable energy sources).

This project action has received funding from the European Commission through a LIFE grant. The content of this section reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains.

**Contact information:**

**David Donnerer, Energy Cities,** david.donnerer@energy-cities.eu
**Femke de Jong, Carbon Market Watch,** femke.dejong@carbonmarketwatch.org