

The Cities Energy Saving Sprint



Toolkit:

**What emergency energy
saving measures should
my city take?**



With the support of



European Committee
of the Regions



**Covenant of Mayors
for Climate & Energy**
EUROPE

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CONTEXT

Since the Russian invasion of Ukraine, the already-urgent energy transition has become even more pressing. Fossil fuel prices, already high in the months before the invasion, are soaring, taking an immeasurable toll on the most vulnerable. The weaponization of gas deliveries shows once again the need for the EU to move away from external dependence as soon as possible and raises concerns about supply shortages for the coming winter.

Member States and the European Union (EU) are taking action. In the medium and long term, the “Fit for 55” package, with its set of energy and climate policies, will lower the European Union’s GHG emissions by 55% by 2030, reduce the use of fossil fuels (including gas) and lead the way to climate neutrality. In the short term, in the REPowerEU plan published on 18th May the European Commission proposed a set of measures to curb the EU’s dependence on Russian gas by:

- diversifying supply
- bringing in more renewable gas
- developing gas storage
- accelerating the clean energy transition, and
- increasing energy savings with the EU’s SAVE plan.

This latter dimension is key to preparing for next winter. Every kw/h saved now will allow us to refill the storage tanks and be better prepared for next winter. Every gram of GHG avoided in the coming months will be an important step, not only for the climate, but also as an act of solidarity with Ukraine. It is therefore important to act now and during the cold season to come.

In parallel with all the measures for profound changes, reduction of consumption and energy transition, there is an urgent need to take emergency energy saving measures today and to plan for energy consumption reductions during the coming winter. Municipalities have a crucial role to play here.

CITIES HAVE A HUGE ROLE TO PLAY

In times of crisis, cities are always at the forefront. Once again, cities are called upon to urgently save energy and participate in the EU’s broad SAVE effort. Cities are responsible for management of a large stock of public buildings (schools, hospitals, sports facilities, municipal offices, etc.), social housing, hard infrastructure and vehicle fleets. They have direct relationships with residents and local businesses. Local governments are already making a difference by taking their share of responsibility and encouraging all local actors and inhabitants to do the same.

Moreover, these measures, in solidarity with the most vulnerable among us, with the most gas-dependent European cities and with the Ukrainians, are beneficial for the climate and necessary for many cities whose energy bills weigh heavily on their annual budgets.

As a local or regional government or a public body, [take part in the Cities Energy Saving Sprint](#) to show willingness to engage with this issue, and attend the various related European events.

WHAT IS THE CITIES ENERGY SAVING SPRINT?

The Cities Energy Saving Sprint is a joint initiative of the European Commission, the Covenant of Mayors – Europe and the European Committee of the Regions to encourage cities to take measures that will immediately reduce their energy consumption. The “Sprint” will last for 4 months.

Launched on 19 May 2022, the Cities Energy Saving Sprint will last until European Sustainable Energy Week (EUSEW) from 26 to 30 September 2022, when we will share the results of this campaign.

In the meantime, cities can seize the opportunity of Energy Days to take emergency energy-saving measures and hold discussions with their residents, staff and local stakeholders. During this period, the Covenant of Mayors – Europe and the European Committee of the Regions will offer dedicated opportunities for facilitating experience-sharing and debates.

EXAMPLES OF EMERGENCY ENERGY-SAVING MEASURES CITIES CAN TAKE

There are many simple measures that local and regional governments can take to immediately save energy within their territories, with minimal or no costs, in parallel with the actions of sufficiency, efficiency and energy transition that they carry out. This toolkit is a non-exhaustive list of measures municipalities can take to save energy and reduce the demand for fossil fuels:¹

Short-term initiatives to reduce municipal energy consumption

HEATING AND COOLING SETTINGS

1. **Encourage an adaptative thermal set point in winter and summer:** Saving energy by lowering heating and cooling energy demand is a key measure that cities can take for their public buildings. In winter, lowering ambient temperatures from 21°C to 18°C can save up to 15% of natural gas consumption.² Additionally, all boilers should have efficient, optimum settings so as not to overproduce hot water, while maintaining sanitary standards. In summer/the warm season, setting the temperature below 25°C can consume up to 10% more electricity per degree.
2. **Deploy Smart thermostats in public buildings:** By adapting temperatures based on whether a person is at home, or a window is open, advanced thermostats can save up to 10% in annual energy consumption without affecting comfort. Cities can invest in such equipment to make energy savings in their public buildings.

¹ These measures are drawn from the International Energy Agency (IEA)'s publication “A 10-point plan to reduce EU's reliance on Russian natural gas” and its “A 10-point plan to cut oil use”, as well as the Zoe Institute's publication “Demand-side solutions to address energy shortages”.

² Data from the initiative undertaken by the City of Amsterdam (see below)

LIGHTING

3. **Adapt lighting systems:** Switching on public lighting later and switching it off earlier delivers consistent energy savings while still delivering essential services. Adapting lighting needs based on weather and seasonal sunlight changes is crucial to making easy energy savings.
4. **Use LED light bulbs:** Cities can equip their buildings with LED lighting. At parity of lumens emitted, LED lights consume 85% less electricity than incandescent bulbs and 50% less than fluorescent tubes.
5. **Ban or reduce shop lights and electric billboards:** An electric panel (2 cm² LCD) consumes about 2000 kWh/year, which represents approximately the annual electricity consumption of a French home (excluding hot water and heating).³ It is therefore a significant saving that the city can make. In the same way, reducing the lighting of historic public buildings and advertising lights in shops can save energy and avoid light pollution.

TRANSPORT

6. **Promote car-free days:** Cities can periodically ban cars from driving in urban areas. This initiative both avoids fuel consumption and normalises the use of public transport. Sunday is usually the day picked by cities as most private vehicles are used for leisure trips. The initiative can save up to one tank of petrol if cumulatively pursued for at least 15 days a year, and about EUR 1000 a year per household⁴ if done every Sunday.
7. **Encourage work-from-home days:** As most urban car use on weekdays is for travel to and from the office, establishing one day of the week for working from home, for those jobs that allow it within city administrations and beyond, can save additional petrol for cars and decongest public transport.
8. **Subsidise fares and passes for public transport systems:** As economic stimuli reshape travel habits, increased use calls for greater frequency and alternatives, which in turn improves the efficiency of the public transport system compared to private transport, in a feedback loop that favours the municipal option.
9. **Reduce speed limits:** The highest fuel efficiency in internal combustion engines is achieved in the speed range of 50 to 80 km/h. Reducing speed limits on outer-city roads from 90 to 80 km/h and inner-city roads to 30km/h positively influences consumption, by reducing acceleration and braking, and only marginally affects travel time.
10. **Close areas to traffic:** Banning private vehicles from entering certain urban areas, either permanently or at specific times, encourages people to choose public transport options to reach their desired destination or to avoid a large detour.

³ ADEME, [Modélisation et évaluation environnementale de panneaux publicitaires numériques](#), September 2020.

⁴ IEA [Playing my part](#) report, 2022.

11. **Encourage ride sharing and soft mobility:** Promoting a carpooling platform or developing a municipal one is a viable solution to reduce energy consumption in commuting to poorly-connected locations. In addition, promoting walking and cycling as alternative modes of transport eventually leads to energy savings.

STOPPING OR CHANGING ENERGY CONSUMPTION TO MATCH SUPPLY

12. **Use dynamic energy pricing to change consumption:** Cities that own municipal energy providers should promote dynamic energy pricing, which encourages users to shift electricity consumption to times of low demand or high renewable electricity supply through lower prices. The measure discourages people from using electricity when demand is high or supply is low through higher prices, thereby reducing peak consumption and avoiding peak electricity generation.
13. **Selective unplugging:** Cities should engage with local communities and stakeholders to explore what services or facilities (e.g. swimming pools, sport centres, museums) to shut down to make massive energy savings and deal with soaring prices. Reducing or completely turning off the energy supply to certain public assets allows the reallocation of finite resources according to municipal priorities. Participation of stakeholders and citizens at the planning stage ensures the acceptability and legitimacy of such emergency measures.

Encourage and support residents and local business to take similar measures

To encourage residents and local business to save energy, local and regional governments can:

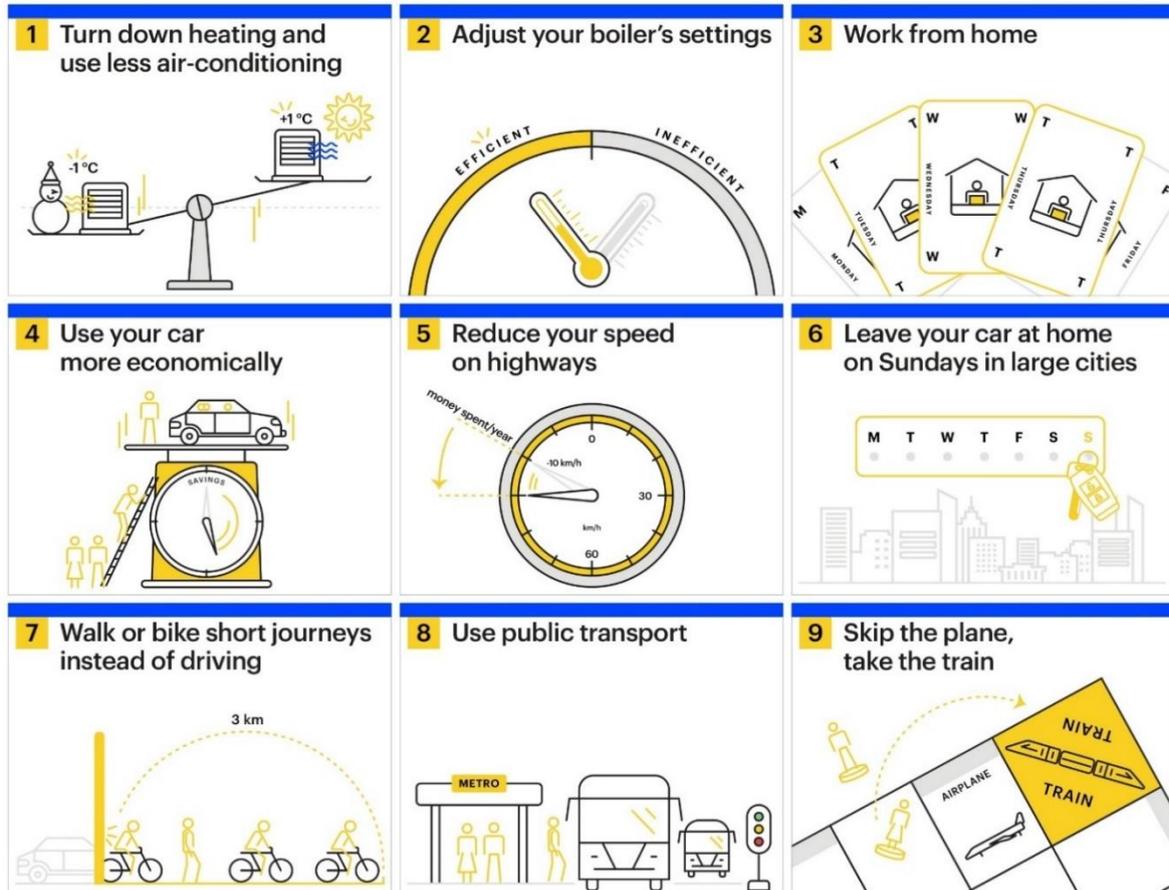
14. **Develop a communication campaign** on the importance of saving energy: as a way of decreasing the financial burden of energy bills, reducing individuals' carbon footprints and cutting the lifeline that is sponsoring the Russian war in Ukraine. Disseminate the International Energy Agency's nine points (see next page) to citizens and local businesses: a set of behavioural norms that can influence an individual's energy requirements, while still maintaining a sufficient level of wellbeing (further details are on the IEA's website⁵).
15. **Provide citizens with energy-saving advice**, such as [videos](#) like the STEP project, energy saving-toolkits (see 'Dublin Best Practice' below) or in-house coaching. For this, municipalities can work closely with social housing energy advice services that have tools, expertise and experience in communicating with the most vulnerable households.

⁵ <https://www.iea.org/reports/playing-my-part>

Playing my part:

How to **save money, reduce reliance on Russian energy, support Ukraine and help the planet**

iea.org



CITY REPORTS

Here is a selection of reports and good practices from cities. The Covenant of Mayors – Europe is keen to hear about the experiences of other municipalities with taking urgent action to save energy. [Send us an email](#) to share your good practices and measures!

Amsterdam (the Netherlands)

“The war in Ukraine has highlighted our dependence on Russian gas. We therefore want to limit our gas consumption by 15% before the heating season. We can't finance Putin's tanks and guns with our energy needs. Furthermore, reducing our energy consumption has been necessary for a long time due to climate change and to keep the planet liveable. Saving energy is key. However, some residents can't afford enough energy, which is why we also want to help the most vulnerable, by helping to insulate their homes and reduce their energy needs.” **Marieke van Doorninck, Deputy Mayor of Amsterdam**

Heating – To reduce municipal dependence on Russian natural gas, from Wednesday 30 March the City of Amsterdam has reduced the base temperature of public buildings by 3°C (from 21°C to 18°C). For sensitive places (e.g. archives, health facilities, orphanages etc.), the temperature was only reduced by 1°C. The initiative stemmed from a gathering of over 60 stakeholders from local government, the private sector and civil society earlier in March.

Campaign – Since the war on Ukraine began, the City of Amsterdam has launched a campaign with stakeholders from all over the metropolitan area to reduce gas consumption by 15%. The campaign includes tips to improve energy efficiency and avoid superficial consumption. The initiative is divided into four pillars: 1) District-oriented insulation measures for households and SMEs; 2) Facilitating collective purchasing of solar panels or insulation; 3) Decreasing energy consumption in office buildings; 4) Decreasing energy consumption in industry.

Lyon (France)

“Given the scale of the energy crisis and climate emergency, and in solidarity with Ukraine, the City of Lyon has strengthened its measures to save energy and replace fossil fuels with renewables, which will accelerate its ecological transition. European cities can have a big impact by jointly committing to a rapid and sustainable reduction of their energy consumption.” **Sylvain Godinot, Deputy Mayor of Lyon**

Heating – The City of Lyon will ensure that the ambient temperature in all public buildings is set to the regulated temperature (19°C on average), depending on the building purpose (elderly care homes will not be affected). The city is consulting with trade unions and employee representatives.

Lighting – The city is switching off night-time lighting at 370 sites from Sunday to Thursday under the “Lyon Lighting Plan”, extending the measure that currently applies 2 days a week. Vehicle-detecting lighting will also be pursued.

Transport – The city is reducing the speed limit to 30 km/h across 84% of the municipal road network (from the previous 34%). For 2 years, the city is also reducing the number of petrol-powered municipal vehicles.

Campaign – The city is actively advertising the energy-source replacement campaigns it is pursuing in the municipality, to instil a transition mindset in the population and raise awareness of the importance of collective action. Replacement of gas through wood-chip burners in schools, heat pumps in buildings not connected to the DHC, and solar panels on roofs.

Paris (France)

“In solidarity with Ukraine and to tackle energy poverty exacerbated by soaring prices, the City of Paris is currently working on an austerity and energy crisis response plan. It is the duty of every European city to take act to respond to the current climate and social emergency.” **Dan Lert, Deputy Mayor of Paris**

Temperature – The city is pledging to regulate the temperature of public buildings according to their characteristics and purposes, while keeping open channels of

communication with their users.

Campaign – The city is committed to disseminating technology to quickly and easily save energy, to lower energy bills for Parisian households and businesses. Paris will continue to support vulnerable consumers by retrofitting their homes and lowering their energy bills.

Engaging with local stakeholders – The city is fostering discussions with major Parisian companies, such as local utility managers and signatories of the Paris Climate Action Charter, to analyse sectoral energy mixes, curb energy consumption and scale up renewable energy.

Networking – Since the start of the war, the city has been in contact with European Commissioners Kadri Simson (Energy) and Elisa Ferreira (Cohesion and Reform) to encourage grassroots approaches to energy solidarity, starting in cities.

Brussels (Belgium)

“The City of Brussels is committed to responding effectively and rapidly to climate issues, the energy crisis and the situation in Ukraine. The city is taking action in relation to both transport and heating, and by this summer will have a climate plan aimed at carbon neutrality by 2050, in collaboration with its citizens and the private sector. Today, it is clearer than ever that the greenest energy is the energy we don’t consume, and in this period of war in Ukraine, it is also the most ethical energy.” - **Benoit Hellings, Deputy mayor of Brussels**

Temperature settings: Since 21 March 2022, the city of Brussels has reduced the heating temperature by 3°C in 11 pilot public buildings including the Town Hall, administrative buildings and sport centres. This could lead to a reduction of 20% in energy consumption. This measure was discussed with staff representatives and trade unions in a meeting with the deputy mayor.

Transport: This summer an ambitious traffic plan, Good Move Pentagon, will redesign the public space to give active modes of transport the opportunity to develop and to give the people of Brussels the chance to move around other than in their cars.

Campaign – Transport: The region of Brussels is also conducting a humorous communication campaign entitled “Bike for Brussels” to encourage residents to cycle on a daily basis, using slogans such as “The biggest outdoor fitness centre is Downtown Brussels”. This is even more relevant in the current context and humour makes the campaign catchy.

Dublin (Ireland)

Campaign – Dublin’s Energy Agency (CODEMA) is a pioneer in energy saving dissemination campaigns, and has been committed for almost a decade to promoting behavioural practices aimed at driving down individuals’ energy consumption for financial and environmental purposes.

In 2013, CODEMA launched an iconic and award-winning awareness campaign called Think Energy to incentivise civil servants in public spaces to reduce their energy consumption, by providing useful tips and work settings to decrease the demand for power.

The success of the initiative prompted the agency to widen the scope of the campaign to reach the general public. Since 2016, CODEMA has developed the Home Energy Saving Kit which include five practical tools (fridge/freezer thermometer, temperature/humidity thermometer, radiator key, thermal leak detector and plug-in energy monitor) and six practical exercises to provide a better understanding of how energy is being consumed in domestic surroundings and how to decrease it. This enables citizens to understand and take control of their energy consumption. They can apply some immediate measures such as changing thermostat settings, and altering consumption habits, especially regarding the use of electric appliances, which can enable them to save 20% of their energy bills. They can also plan some long-term measures such as insulating external walls.

The toolkit is available in 100+ public libraries in Ireland. Public libraries are charged for the toolkit and citizens can borrow it for free. CODEMA made substantial efforts before the launch, but demand is now constant and is expected to grow as energy prices increase.

Flămânzi (Romania)

Lighting – A fourfold increase in municipal electricity bills between January and December 2021 (from 14,000 to 60,000 lei) prompted the municipality to turn off public lighting between 11 pm and 4 am. The high energy bills are also forcing local authorities to reassess their budgets to cover the cost of the inflation. The population of the little town did not welcome the measure, accusing the town hall of having taken an initiative that would encourage theft and other criminal activities during the night.

Geneva (Switzerland)

Heating – The city is devising a plan to reduce indoor temperatures in public buildings over the upcoming winter.

Training – The City of Geneva is working closely with the local utility company to deliver effective energy-saving measures while minimizing the impact on Genevan livelihoods, focusing on financial assistance and training for professionals.

Campaign – The city has been active in public campaigning to encourage temperature reductions in households during the cold season, raising awareness among the local population and moderating and assessing temperature-setting requests.

Finance – Since the war in Ukraine began, financial incentives for building retrofits have been boosted.

Sredets (Bulgaria)

Lighting: In early 2021 the price of electricity was around 45 EUR/MWh, one year later the price is 200 EUR/MWh. The municipality has taken two measures to decrease electricity consumption by street lighting, which have already shown results:

- 1) Switch on the lights 20 minutes later and switch them off 20 minutes earlier. This will enable savings of 5,817 kWh/year and 6.86 tCO₂
- 2) Reducing the intensity from 11 pm to 5 am instead of midnight to 4 am, enabling savings of 5,288 kWh/year and 6.24 tCO₂. The city emphasises that these measures involve zero investment, as they only require changing the settings of the lighting management system. In total, the municipality expects to save EUR 2,220 at current electricity prices.

Toruń (Poland)

Lighting – The city has been enduring unsustainable electricity prices since spring 2021, when the municipality decided to switch off public lighting in one-third of the city. By the end of the year, the initiative had produced savings of PLN 2.1 million. In 2022, with power prices up by 90% since the measure was first adopted, the mayor decided to renew the decree with additional provisions:

- 1) Ad-hoc energy-saving measures for the public buildings consuming the most energy.
- 2) Obligation to present energy-saving schemes for every office and space controlled by the municipality.

Valencia (Spain)

Campaign – It is estimated that local SMEs are spending 10% of their annual revenue on electricity bills, which in the last year has been exacerbated by a 20% increase in energy bills. The economic recession caused by the COVID-19 pandemic has hit businesses hard, especially local businesses, leading to tragic closures or contractions from which they have not yet recovered. In November 2020, the City launched Negocio Local Sostenible, a self-financed platform to increase local SME competitiveness through energy cost savings and the promotion of locally-sourced renewables. The project consists of free energy advice (delivered remotely or in person) and short reports with ad-hoc suggestions for energy saving actions. SMEs wishing to participate only need to provide their latest electricity bill. The pilot involved 180 local SMEs and delivered an average of €937 annual savings per business. The energy crisis revamped Negocio Local Sostenible, which is now set to cover 3000 local SMEs in the period 2022–2025.

WHAT'S NEXT?

It is up to you to act now and make those urgently-needed energy savings!

Join the Cities Energy Saving Sprint: [Register here!](#)

Use the [Cities Energy Saving Sprint's communication kit](#) to promote your local actions and be part of an EU-wide movement. #EUCitiesSaveEnergy

Visit the Covenant of Mayors – Europe website – www.eumayors.eu – to find out about upcoming events related to the Cities Energy Saving Sprint and share your experience with the Covenant of Mayors Office by [sending us an email!](#)

Join the Covenant of Mayors movement!

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