



Promoting energy savings in private households and in the private sector

*This guidance note forms part of the project [Polish-German cooperation on low-emission economy in cities](#) and builds on the outcomes of a workshop held in June 2016 in Czeszochowa, Poland. There, representatives of Polish and German municipalities presented project-related experiences with engaging local stakeholders (citizens and businesses) in climate and energy actions, with a special focus on boosting energy savings and renewable energy consumption. These municipalities were successful in reaching out beyond their traditional scope of action and responsibilities. This note revolves around the following questions: **What makes these municipalities successful in their engagement with non-municipal actors? What recommendations may be derived from these practical experiences in order to replicate and scale-up action on the local level in both countries?***

Setting the scene: Why engaging stakeholders?

In Poland, the municipality's mandate and scope of action encompass inter alia spatial planning, local public transportation, primary education, maintenance of municipal facilities. Municipalities hence have many levers at hand to influence the local energy consumption. However, they often choose to focus on improving their local energy management and the energy efficiency of public buildings. This traditional scope of action will not suffice to fundamentally reduce the energy consumption city-wide. The municipal administration can play a model role, but is a relative low energy end-user, while the main consuming sectors on the local level are businesses and private households. Also, cities have a high potential for transformational change to a great extent due to the people inhabiting and shaping them. Therefore, no long-lasting, sustainable energy consumption patterns can be reached without a proper engagement of non-municipal stakeholders.

Key barriers to stakeholders' engagement

Experience made in Polish and German municipalities show common challenges in engaging with stakeholders – e.g. associations, businesses, households, institutions, utilities:

- **Preaching to the converted:** Initiatives targeted at the local community – households and businesses alike – often appeal to groups that already have a certain awareness of either the issue of climate change and air pollution, or of the benefits associated with the low-emission actions. **In both countries, it is difficult to reach out beyond the pioneers.** The bulk of stakeholders often cannot associate low-emission actions with individual interests or solutions to potential individual issues. Even when the low-emission narratives are already quite mainstreamed, as in Germany, it can be difficult to successfully engage stakeholders in local actions due to a “saturation effect”. In the district of Marburg-Biedenkopf for instance, an initial independent energy counseling session was available for free and yet, this service was hardly used. Municipal decision-makers face the challenge of developing of individual lines of arguments and finding participation formats that will meet the target audience's expectations.

- **Going beyond information to active participation:** In many municipalities, engaging with the citizens and local businesses means informing the target groups. Outreach efforts are often limited to the distribution of information, either in writing (flyers, brochures) or in the form of events where the information and experience only flow in one direction. Participatory processes are associated with time constraints, loss of control from the municipal staff and therefore additional risks.
- **Offering financial incentives:** To turn words into concrete actions, adequate financial solutions must be provided to non-municipal actors, while municipalities often face budgetary restrictions themselves. Some of the measures that may trigger a shift to sustainable energy consumption patterns can be implemented at no to low cost, i.e. with a short payback period (e.g. replacement of household appliances, change in daily habits). However, investments may be required in complement to reach a certain level of ambition in climate action and in the reduction of air pollution. Municipalities may find themselves limited in their action notably when the national legal framework does not provide sufficient incentives e.g. to retrofit private buildings, exchange old stoves or develop photovoltaics in private households and businesses via an encouraging feed-in tariff.

How to overcome these obstacles?

Ask the right questions: Municipalities should start any outreach process understanding the local context and the expectations of all actors to be engaged, as there is no single best approach to low-emission action. A useful start is to explore the following questions:

1. What are the motivation and interests of the municipality to engage with external actors?
2. What are the motivation and interests of the target audiences, on which the municipality should build to develop its range of actions?

Get inspired by successful practices: Decisive for decision-makers is to understand the why practices in other municipalities turned into good practices. To support this effort, we extracted in this note key success factors and innovative solutions for a successful engagement of non-municipal actors from hands-on practices in Poland and Germany.

Practice-oriented recommendations

1. Choose entertaining formats & build an emotional connection

Municipalities rightfully first look for ways to educate citizen and local businesses about the necessity and potential of low-emission action. However, how to overcome the above mentioned challenges? Engaging stakeholders starts not only with **creating a common ground of understanding, but also highlighting shared values and appealing to interests that are already existent**. The communication vehicle is therefore paramount. Experience shows that festive events are successful at gathering a wide range of actors, particularly across generations. Also, creating an emotional connection to the issue is a PR strategy that can be very helpful to municipalities.

Good practice #1 Bielsko-Biala implemented a powerful campaign as part of the European project ENGAGE (a communication program of the European Commission's Covenant of Mayors). The municipality involved the local community and hung up **customized posters displaying pictures of over 1.000 volunteers, called "climate ambassadors"**, who committed themselves to practical energy savings measures and the promotion of environmental protection at their own level. The posters displayed citizens from various backgrounds (**citizen, local businesses, representatives of institutions and public servants**), thereby creating an emotional connection to various groups and demonstrating that saving energy and protecting the climate can be achieved even with small investments. The municipality of Bielsko-Biala first reached out to the youngest citizens through the Youth City Council before reaching out internally to the City Board of Education, teachers, political actors, public figures, incl. a famous local glider, and business associations from the power sector – thereby creating momentum for the campaign. These ambassadors are more than the faces of the campaign; they help on a daily basis spread information and raise awareness based on their own individual experience. The emotional connection to the This campaign first financed by the EU

Commission with the amount of EUR 66.000 over 3 years proved so successful thanks to its **participative and playful approach that the city is continuing the project with its own funds**. The city decided to use further communication tools for the social engagement and created an energy festival – the Beskids Festival for Good Energy – organized yearly. Over 100.000 citizens from various backgrounds, participate in the educational and cultural activities: the municipality organized games, such as the festival’s favorite “Master the energy”, where the families with children used a map to look for mysteries associated with the use of energy in their daily lives and gained points in energy savings quiz. Numerous other activities included workshops, film screening, picnics, shows and performances related to the low-emission transition. The festival is also a platform for promoting the contests for the best energy management led by the city among schools and preschools on the yearly bases. Overall, Bielsko-Biala raised PLN 764.000 (about EUR 170.000) from private sponsors, national or European funds and equity capital to implement such an extensive campaign. Through this project, Bielsko-Biala won multiple awards both at national and European levels, proving that successful communication campaigns can effectively help building momentum in the local community and attracting funds from supra-local levels. More information and material about Bielsko-Biala’s ENGAGE campaign is available [here](#) (EN).

Good practice #2 Creating an emotional connection can be more than a tool and influence the overall municipal strategy: the **district of Osterholz** chose to set up a local energy advisors network – [ENERKOM-OHZ](#) (DE) – although it could have redirected its citizens to the already well established network of the nearby city of Bremen, thereby avoiding costs and efforts. However, the city of Bremen and municipalities of the district of Osterholz show different socio-economic features, which could jeopardize the efficiency of the project. **Forging a local identity and catering for the interests of a more rural region was an important factor in appealing to the target audience:** i.e. on one hand, to the advisors themselves, and on the other hand, to the private households and businesses resorting to the services.

Good practice #3 In the district of Marburg-Biedenkopf, a **PR campaign based on comics** figure helped raising awareness on the energy and financial savings potential available in each household. A [short trailer](#) was produced for the cinema in order to increase the reach of the scope and the diversity of people. This is a **useful PR tool with low cost** (EUR 4.500), **which can be easily replicated**. In parallel, the municipality started a contest in cooperation with a partner electrical retailer to [raffle various domestic appliances off](#) (DE) (e.g. TV, refrigerator). Participation was very easy: the private household only needed to send technical data and a picture of their appliance (year of manufacture is particularly important) to the municipality. The least efficient appliance won the contest and the appliance was replaced for free with a state-of-the-art, energy-efficient one. The **combination of playful action and potential financial gain made the contest very popular**. It triggered behavioral change by revealing the real energy intensity/ costs of the old appliances and delivered easy energy savings as many appliances in operation were built before the introduction of energy standards in the mid 1990’s. The contest first targeted on old refrigerators (2014), then washing machines (2015) and old cathode ray tube televisions (2016). This initiative has already been partly replicated in two municipalities in Germany and another one has asked for usage rights.

Good practice #4 A casual atmosphere can also be used to reach out to local businesses. In the district of Marburg-Biedenkopf, [energy breakfasts](#) (DE) targeted at the local industries build on an inexhaustible interest: **appetite!** Choosing an informal context, where snacks and drinks are provided, helps to build a first bridge towards the target audience. Costs are low (max. EUR 100 per event) and can be covered through a partnership with a local catering firm, delivering win-win benefits.

2. Show don’t tell! The power of demonstration

Showing results is worth 1.000 arguments. Traditionally, the demonstration effect of projects is limited to the municipal administration that takes on a model role for the community, e.g. via the refurbishments of public buildings or energy saving measures in the administration. While it is useful and important that the municipal staff has an exemplary role, actions from other peers conveys a strong message and helps build momentum: if they can, I can. Or we can do it together.

Good practice #1 Niepolomice installed a **screen in the public space, which displays the total amount of energy savings already achieved** as an accompanying measure to the development of photovoltaic panels on private homes, and in complement to a wide range of PR tools used for the

promotion of the program (meetings with citizen, trainings with children and adults, book and website, articles in the local press).

Good practice #2 In the district of Marburg-Biedenkopf, an important effect of the domestic appliance contest (presented above) was that private households got to measure the consumption of their own appliances themselves. The municipality **lent ammeters to citizens and thereby enabled them to personally and easily measure the potential for economic savings**. This greatly contributed to the incentive of replacing old appliances, beyond the sole dimension of the contest.

Good practice #3 The energy breakfasts organized by the administration of the district of Marburg-Biedenkopf are also successful because they **take place directly where changes happen** and in a compact format. The incentive for hosting business is to **present themselves as innovative pioneers**. The breakfasts include a tour of the industrial facilities and demonstration of the installed energy efficient techniques. Other businesses are invited to participate as sponsors, and energy advisors are invited to provide on-site services. The creation of added value at the regional level and at the individual level of the companies is in the foreground, which are common interests of both the private businesses and the municipality. In parallel, businesses can take this opportunity to exchange practiced-related experiences and network.

Good practice #4 Bielsko-Biala's ENGAGE campaign was not a one-off event limited to communication. Rather, it encompassed the **monitoring of energy consumption of private households and businesses that committed themselves to energy savings through the campaign** (61 entities). Evaluation tools were set up in order to demonstrate the outcomes of the individual energy saving measures. For private households, the municipality chose to use an [online CO2-calculator](#) (PL) originally developed in the context of COP14 in Poznan following the IPCC Guidelines. This tool was once financed by the Civic Initiative Fund (*Fundusz Inicjatyw Obywatelskich*) and is **available for free, allowing for an easy and widespread use**. Private households were asked to estimate their CO2-footprint at the beginning of the project, as a baseline, and then again (at least) one year later. The municipal Energy Management Office used the opportunity of photo shoots for the posters (see above) and educational actions in schools to let households complete the baseline form. The evaluation results proved savings of more than 7 million kWh of energy. The average individual share of primary energy saved is -22%.

3. Provide credibility and trust: know when and how to delegate and involve stakeholders

The role of the municipality is not limited to providing services to its citizens. It can also play an important part in ensuring that external services are delivered in a good quality. Experience shows that municipalities that were successful in developing low-emission measures with the various stakeholders created a **stable, credible framework, and built trust among all parties**.

The most direct way of building trust is making sure that the administration itself is credible, i.e. committed to low-emission action. In Bielsko-Biala, one of Poland's environmental pioneer cities, the Energy Management Office has been developing and enforcing energy saving measures for 20 years, thereby developing in-house expertise and building a certain reputation. However, municipalities that do not have a long track-record in environmental or energy policy can still play a crucial role in providing a credible framework for low-emission action. **Delegating (part of) the implementation can be a powerful mean to build trust in the local community because it shows that the municipality does not have a direct economic interest in the realization of the measures**. At the same time, engaging citizens and local businesses in the implementation of the measures **helps to share the potential incentives with and get buy-in from local stakeholders**. One precondition for successful involvement of stakeholders is that the institution / company / or individuals are selected in a transparent manner. It is also helpful, at least in the initial implementation phase, to partner up with businesses that are already financially viable.

Good practices #1 In Cölbe, the municipality finds it attractive to involve citizens because the municipality has only 16 staff members. **Resorting to the citizen's expertise can not only empower the local community and thereby build credibility, but also facilitates the development and implementation of the measures**. This is a win-win situation.

Good practice #2 The municipality can also play an important role **in taking on a role of certifier**, i.e. building up a framework of rules and standards that may ideally lead to self-regulation and

decentralized actions. In the district of Osterholz, the energy saving network [ENERKOM-OHZ](#) (DE) has been **developed jointly with the advisors themselves** (companies or freelancers) **based on criteria and quality standards that were established on the basis of consensus**. The network is now self-regulated and any energy advisor can join as long as she/he fulfills the criteria. Delegating the power of regulation to the advisors and operating on consensus basis **was a useful way of overcoming economic competition**, who were first skeptical at the idea of collaborating and providing a first assessment for free. It helped develop mutual acceptance and build a shared work ethic. In addition, it helped demonstrate that there is no corruption or favoritism: **no technology or advisor is preferred by the municipality**. Self-regulation does not come without challenges: it took three years until one of the advisors was forced by his peers to leave the network, but then the network gained in credibility and acceptance among all parties. A private company helped moderate the development process of the network for only EUR 250.

In parallel, the municipality **developed a certification for the network's members**. In Germany, "energy advisor" is not a protected concept. The advisors have various backgrounds: architects, engineers, master crafts(wo)men, technicians. Ritterhude thus developed a biannual training for the network's members and delivers upon completion a certification that is proof of quality for the private households. At the same time, it ensures that advisors are up-to-date with the latest available technologies and regulations.

4. Offer innovative financial solutions

To go beyond the mobilization through campaigns and effectively trigger long-lasting changes, new investments must be made by all stakeholders. The municipality can play a role in facilitating financial solutions, even when its own budget is limited. The experience shows that successful municipalities were able to **gain external funds, build variety of partnerships with the private sector** and to establish **financial schemes that blend public and private capital** to increase the energy efficiency and the air quality in cities (e.g. co-financing for private building retrofitting or exchange of old stoves).

Good practice #1 Municipalities can play an important role by cooperating with a local financial institution to create enabling conditions for private households or businesses. The municipality of **Niepolomice** [helped private households installing solar panels on their private homes](#) (EN) by securing two third of the overall required budget through a grant from Polish-Swiss Cooperation Fund (PLN 57 M, about EUR 13 M). Beneficiaries covered 30% of the costs (see good practice #2 below) and the municipality only contributed 5% of the total budget, making this type of project replicable in municipalities that have a tight budgets. Further, the municipality **negotiated credit conditions** to make PV installations more affordable to the citizens. In **Koscierzyna**, the municipality took the role of coordinator, and negotiated special conditions for its citizens with a local bank so that households and businesses can finance the energy-related refurbishment of their buildings. In Cölbe, the municipality partnered with the local bank to offer households [saving bonds ranging from EUR 1.000 to 10.000](#) (DE) with a guaranteed interest rate of 3.25% per year, which helped finance the development of a local solar plant. This made sustainable investments available to low and middle income households, while persons with a higher capital could participate as a limited partner in the company with 33.000 EUR and a commitment over 20 years, incl. an annual return rate of 6.8%. The saving bonds model has gained popularity in Germany over the past decade and can be found in many pioneer municipalities to finance various low-emission economy measures, proving its high replicability.

Good practice #2 Due to its limited capacity to implement the measures by itself, the city of **Sosnowiec** decided to use the ESCO formula to significantly decrease the use of energy in public buildings (electricity by 25 % and heat by 30%). [Siemens has invested PLN 17 million \(about EUR 4 million\) under a 10-years contract](#) (EN). It installed a remote energy monitoring and control system for 87 schools, modernized the school's heating and light systems and provided additional energy related services (technical overhaul of buildings, trainings). Although the city needed to share their potential income with the investor (about EUR 4 million rewarded to Siemens, about EUR 1,5 million energy savings for the municipality), the energy savings are expected to deliver PLN 20.4 M (about EUR 4.6 M) over the contract delivery period (2013-2023). The partnership enabled to share associated risks, the municipality gained substantial and practical knowledge, and new capacities were built within the municipal staff. Last but not least, a complex measure could be implemented with no up-front

investment from the municipality, while creating a stable and transparent framework for services delivery. The City of Hagen, acting under the constant budget constraints, also created a public-private company (holding 51% shares in the created SPV) and established a successful business model, which enabled to conduct major investments in the city lightning.

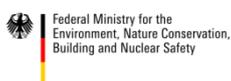
Solutions – summary of takeaways

- Picking low-hanging fruits is an art! There are many solutions available at low-cost, notably those respective to changing the consumption habits of private households and businesses. Yet, to implement them successfully, municipalities must resort to creative means, often **going beyond the traditional scope of action and trying new forms of cooperation with the local community**.
- Municipalities that are successful in delivering results and benefits to the local community mostly **act as an intermediary, building a stable, supporting framework and empowering the citizens and businesses** in making sustainable choices.
- Engagement with stakeholders must be thought **hand-in-hand with longer-term, integrated policies**. Good participation processes, numerous projects involving the local community and innovative financial solutions for individuals do not release municipalities from their strategic task of tackling air pollution and climate change in a structural manner.

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