

# IURC-KANSAS CITY RENOVATION WAVE NETWORKING EVENT

Bringing cities together to achieve a sustainable built environment

7th - 9th April 2022











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## How Can We Accelerate GHG Reductions in Existing Buildings?

#### **EDUCATION AND ADVOCACY**

- · Developing an energy hotline.
- Providing energy audits and supporting a DIY approach such as the one implemented by Neighbors Helping Neighbours.
- Creating a list of demonstration buildings/ homes and contractors.
- Educating city staff to ask probing questions during the building permit process.
- City staff providing energy audits.
- Implementing an energy rating system based on data analysis (possible cooperation with utility companies).
- Educating on the return on investment of energy reductions.
- Announcing information about incentives through social media networks like the Metropolitan Energy Center has been doing.
- Advocacy for the state to do more around building and retrofit codes.



#### **INCENTIVES**

- Subsidizing the construction of demonstration buildings to develop the labor market and supply chain.
- Developing a program such as Kansas City's Exterior Homes Improvement Program that includes funding for energy audits and incentives for improvement.
- Providing sales tax rebates for energy performance upgrades in certain areas through sales tax sharing agreements such as those implemented in Aurora, IL.
- Providing property tax rebates for energy performance improvements which supports maintaining affordable rents in Orlando, FL.
- Providing first retrofits in low-income neighborhoods before a mandate is implemented (no income qualification is required in the case of St Paul, MN).
- Focusing on one sector and doing it well. ex. Firehouses or beauty salons.

#### **REGULATIONS**

- Requiring an energy performance audit/rating whenever a building changes function/use.
- Performing property standard inspections to trigger existing buildings to improve their energy performance.
- Outlining building benchmarking and building performance standards.
- Requiring listings, including for approval of AirBnb licenses, to announce energy scores.
- Requiring minimum energy scores to sell.
- Funding roaming energy retrofit managers.

#### **TECHNOLOGY**

- Implementing aerobarrier for air sealing .
- Utilizing wood fiber and low embodied carbon insulation to avoid carbon increase.
- Conduct thermal scans drives.
- Incentivize heat pump bulk buys.

#### Solutions to transition to renewable energy sources

#### **ELECTRIC VEHICLE SOLAR CHARGING SYSTEMS**

- 1. The system is growing.
- 2. In Kansas City there is a focus on the 11,000 city employees to expand the
- This technology is useful to test demand in new spaces and eventually change them to permanent systems.
- It can be also useful for limited or tight spaces or where the initial infrastructure is expensive.

#### **SOLAR ARRAYS**

The Northern Virginia Regional Commission (NVRC) has extensive experience supporting local governments with procurement and requests for proposals (RFPs) for solar arrays and it has become a revenue stream through solarizenova.org. They have also developed a robust solar map that shows homeowners and business owners the amount of energy that can be generated on their rooftops.

#### Solutions to transition to renewable energy sources



#### **UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)**

Europe has a long tradition of incorporating the SDGs in its programs and initiatives. However, in the USA, they have just started to become a framework for local government, private businesses, and academic and philanthropic institutions. Regional governments are interested in learning how to use them as guides for collective action.

# CHALLENGES TO TRANSITIONING TO RENEWABLE ENERGY SOURCES

- Photovoltaic cells may become a service where municipalities lease solar arrays. However, there is a complex relationship between municipal taxpayer money and public perception.
- Municipal staff taking an electric vehicle for longer trips where it might be difficult to recharge and how to reimburse city staff for those expenses when typically it would be free within the system.
- In Europe, several cities don't allow private vehicles in certain areas or only allow electric vehicles. This measure has not been implemented in most North American cities. However, they are starting to deploy high-accurate vehicles or low-emission lanes.
- 4. Conservative leadership may become a challenge when discussing climate change and these solutions. A way to push them forward is by changing the language of these priorities and reaching your audience based on what's critical to them.

#### **Featured Program**

#### **ENERGISPRONG**

After an Energiesprong retrofit, a home is net zero energy, meaning it generates the total amount of energy required for its heating, hot water and electrical appliances. It also provides superior indoor comfort. This can be achieved by using new technologies such as prefabricated facades, insulated rooftops with solar panels, smart heating, and ventilation and cooling installations. A refurbishment comes with a long-year performance warranty on both the indoor climate and the energy performance for up to 40 years. A complete home makeover can be completed in less than 10 days, and some have been done in as little as a day!

In general, an Energiesprong renovation or new build is financed by future energy cost savings plus the budget for planned maintenance and repairs over the coming 30 years. This allows residents to keep the same cost of living. In the case of housing associations, tenants pay the housing association an energy service plan which is the equivalent of their previous energy supplier bill. The housing association can use this new income stream to partly fund the renovation works. Typically, legislation needs to be amended to allow such a conversion of the monthly energy bill into a monthly energy service fee for the housing association. https://energiesprong.org



## **Participating Organizations**

**Arnold Development Group** www.arnolddevelopmentgroup.com

**Bridging the Gap** 

www.bridgingthegap.org

**Building Energy Exchange KC** 

**Climate Action KC** 

www.be-exkc.org www.climateactionkc.com

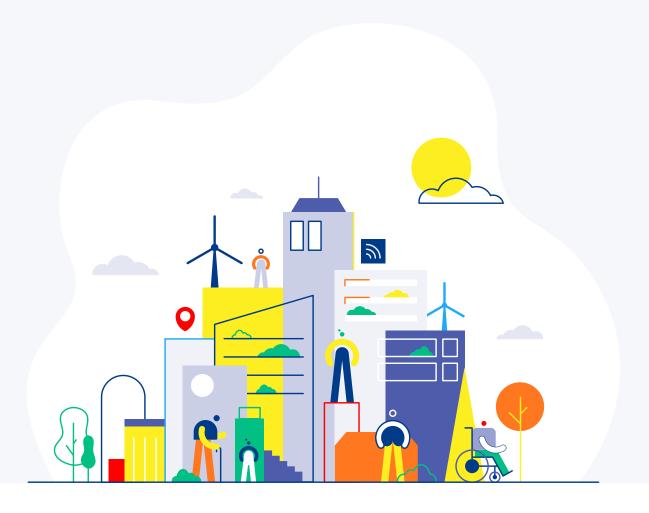
**Heartland Conservation Alliance** 

**Metro Energy Center** www.metroenergy.org

Streetcar KC

www.kcstreetcar.org

www.heartlandconservationalliance.org











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