

# Now/New/Next

Urban Energy Transition Insight Series

## City-wide Energy Planning as a local strategy to deliver a competitive climate transition

Cities play a key role in achieving Europe's climate goals, which will be increasingly influenced by how energy is managed at local level. But current city energy plans are either non-existent, fragmented or lacking specific action plans to achieve energy net-neutrality. A recent study by the EU's Joint Research Centre found that 72% of cities lack even a rough estimation of the costs of transitions to net-zero. This edition of Now-New-Next details how city energy planning will step up in the coming years.

About  
Now  
New  
Next

The **Now-New-Next** series highlights innovative concepts and trends within the Urban Energy Transition, covering the Political, Economic, Societal, and Technological advances that will be central to local energy transition.



### Challenge

- While European cities are setting out ambitions to become climate neutral by 2030, 2040, or 2050, **there is a shortfall in adequate city-level energy planning**. Interaction with energy supply and demand stakeholders mostly takes place at operational, day-to-day level.
- **Existing strategic energy planning is typically done at regional and national levels in a top-down model**. This leads to an absence of bottom-up energy planning informed by local policies and strategic objectives at municipal level.
- **Lacking strategic city-wide energy planning, city departments typically do not coordinate access to distribution grids**, banking on using capacity of the grid that may already be relied upon by other department electricity expansions.



### NOW : High-level and fragmented

- Most cities have high-level climate and energy plans in place, notably the Sustainable Energy and Climate Action Plans (SECAP) required of members of the Covenant of Mayors. But these **strategies are not always fully aligned with the relevant local stakeholders**, notably Distribution System Operators (DSOs) who operate the local grid.
- While the UK has advanced the Local Area Energy Planning (LAEP) concept, **in mainland Europe there are few examples of highly detailed local action plans** which translate strategy and vision into actionable, place-based planning models.
- **Decision-making with implications for the local energy system is typically at department level** (mobility, housing, urban development, etc.), with only limited, ad-hoc coordination across departments.
- Many city climate departments focus on renewable generation and energy efficiency (isolation, PV), **without a view on the underlying grid infrastructure**.
- While some cities in Europe have heat transition plans in place, which outline joint strategies with local heat network operators (often publicly owned) to deliver cost-efficient district heat networks – almost none have an equivalent for electricity grids.



## NEW : Moving towards cross-departmental alignment

- **Frontrunning cities are mapping active local policies on energy** across departments, to be able to create an city-wide energy strategy including commitments, risks and responsibilities, defining the strategic objectives and operational scope for cities to act in.
- To achieve this, cities including Antwerp and Ghent are establishing initial **internal working groups**, to integrate people, ambitions, and plans of the different disciplines present in a city.
- **Dedicated energy teams** are being established and are working on initial political and organisational buy-in across internal horizontal (other city departments) and vertical (directors, deputy mayors, etc) lines.
- Key, non-governmental stakeholders, such as the Distribution System Operator (DSO), housing companies, businesses, and residents **are being engaged** to align planning needs beyond city hall.
- **Pilots** of city energy action plans across a dedicated geographical area (neighbourhood, business park, district) or specific themes (electric mobility, PV) are being developed in cities like Antwerp, Ghent and Dordrecht.
- As cities increasingly encounter grid congestion (particularly in the Netherlands and in Belgium) and energy resilience rises up the political agenda, **energy planning is being treated as a tool for city-level competitiveness and resilience** as well as a delivery method for the climate transition.



### CASE STUDY

#### Towards integrated city planning across more than 10 city departments in Ghent

The city of Ghent in Belgium, with a population of 270,000, has set an ambitious goal to create an all-electric neighborhood in the Mariakerke area. To achieve this, it has identified Local Energy Action Plans (LEAPs) as a strategic tool for city energy planning, enabling proactive collaboration with both internal and external stakeholders. These plans integrate the current and future net-zero state of the local electricity grid into decision-making processes.

As the lead partner of the COPPER initiative, Ghent has found initial commitment at ten different internal city departments beyond the Environment & Climate Department, including departments for mobility, housing, economic services, policy, and more—all essential in transforming Mariakerke into an all-electric neighborhood. This collaboration led to the formation of an initial working group, with a designated contact person from each department and guidance from key vertical stakeholders, such as topic directors. Additionally, the city of Ghent has secured an initial agreement with its local DSO, Fluvius, to align on commitments and responsibilities in order to plan for local interventions.





## NEXT : Collaborative and strategic City Energy Planning

- In the next decade, city energy planning will become a feature of nearly every city climate plan, with **full political and organisational buy-in** backed by adequate resources, dedicated capacity and tools (e.g. digital systems, real-time data) on strategic city level.
- Through this formalisation process, local energy system decision-making will become **one of the key levers for cities to become climate neutral while remaining competitive and resilient.**
- City-wide Local Energy Action Plans (LEAPs) will become **living official local policy documents**, setting out working procedures between departments and across stakeholders, and updated through integrated working groups across city departments and the DSO.
- **LEAPs will become the central mechanism around which joint decision-making** with DSOs and large energy demand stakeholders will be taken, to ensure alignment on city-wide goals.

### Now New Next – City Energy Planning

#### NEXT

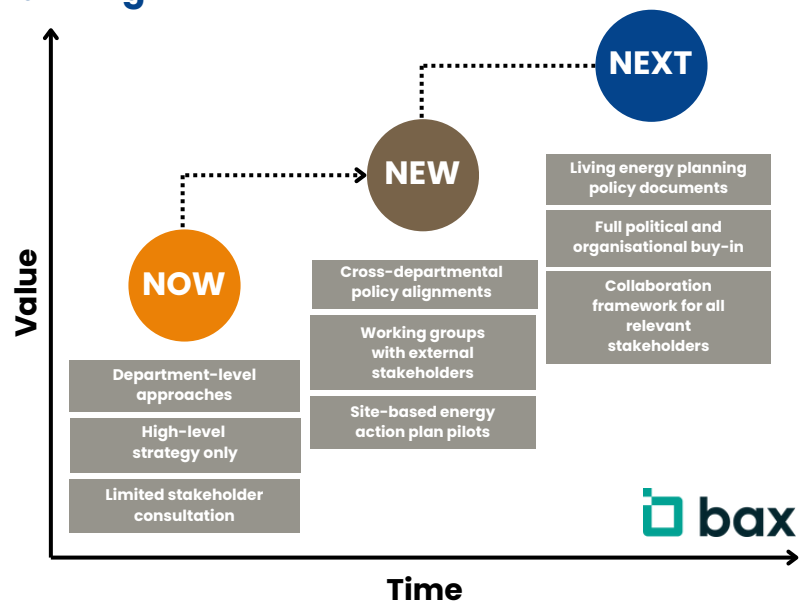
Cities organise around local energy planning both internally and externally

#### NEW

Cross-department coordination and strategic stakeholder relationships start to be formalised

#### NOW

City Energy Planning is confined to high-level strategy, with not all relevant stakeholders on board.



### About Now New Next

The *Now New Next* series is developed by the COPPER partnership, an initiative in which six cities and representatives from DSOs, academia and business are building Europe's first wave of Local Energy Action Plans.

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Learn more: [interregnorthsea.eu/copper](https://interregnorthsea.eu/copper)  
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