



# EMPOWERING THE FUTURE OF YOUR CITY



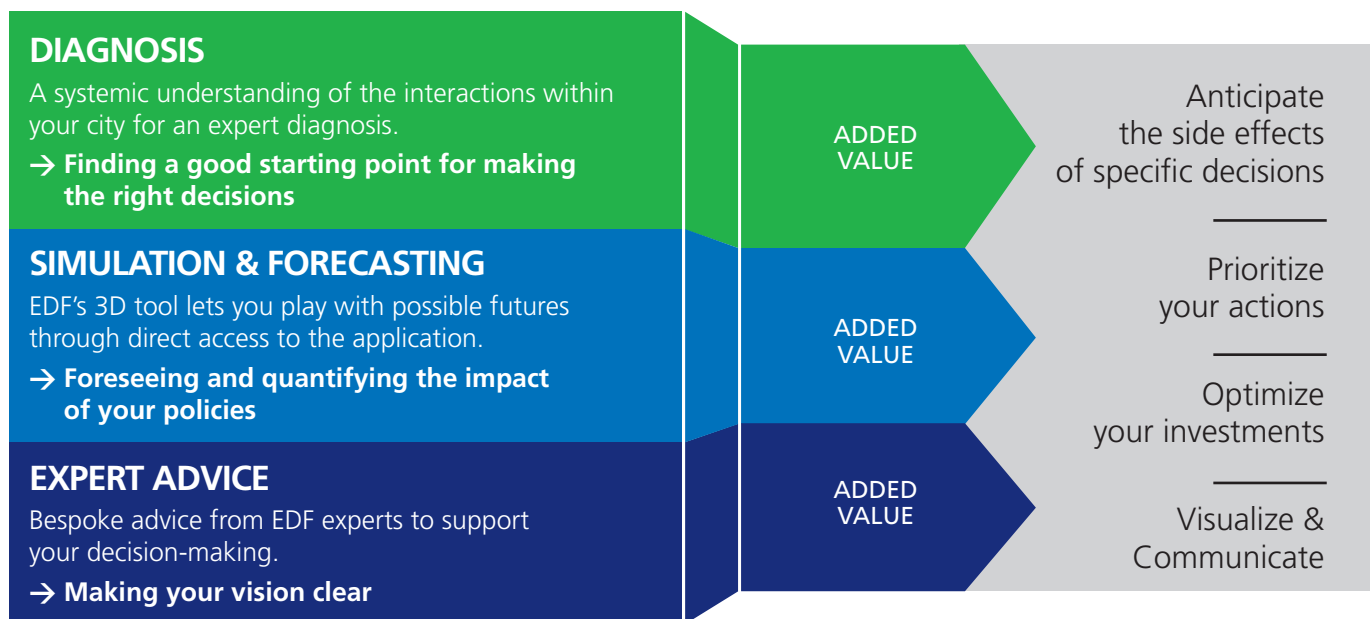
# EDF'S INNOVATIVE APPROACH SUPPORTS CITIES' SUCCESS

EDF has in-depth expertise in the low carbon energy sector coupled with a long term commitment to fostering technical, social and business innovation.

EDF Research and Development has established an international sustainable cities program to offer an integrated approach focused on empowering local government decision-making. We aim to meet the needs and fulfill the objectives of today's cities as well as improve the quality of urban life.

// We are proud to pave the way for a better future for cities. EDF's long-term goals and vision reach out to help shape a new world. //

**EDF supports decision making through services** with Diagnosis, Simulation & Forecasting, and Expert Advice for key urban sectors. To meet their individual requirements, EDF works with cities to analyse their specific challenges and provide **tailor-made solutions**:

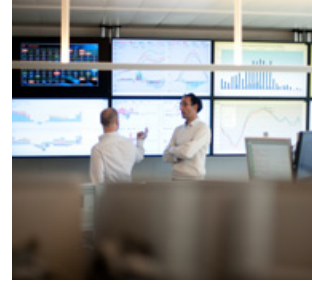


EDF offers a complete range of services in various urban sectors.



### OPTIMIZED URBAN SYSTEMS

- Low Carbon City
- Integrated Planning
- Density & Mixed Use
- Urban Morphology & Energy Demand
- Interactions between Sectors
- Urban Heat Island



### ECONOMIC ANALYSIS

- Investment & Operational Cost
- Employment Impact
- Cost Benefit Analysis

### EFFICIENT BUILDINGS & INFRASTRUCTURES

- Green Buildings
- Energy Efficiency
- Renewables Integration
- Smart Homes
- Green Roofs & Facades
- Public Lighting



### LOW CARBON ENERGY SYSTEMS

- Clean & Renewable Technologies
- Smart Grids
- Demand Response
- Heat & Power Optimization
- Decentralized Energy
- Energy Demand Forecast



### QUALITY OF THE ENVIRONMENT

- Air Quality
- Greenhouse Gas Emissions
- Climate Change Mitigation
- Waste & Water Treatment
- Biodiversity
- Natural Resources
- Ecosystem Services



### IMPROVED LIVEABILITY

- Sensitizing
- Response to Policy
- Innovation Acceptance
- Energy Poverty
- Community Education

### IMPROVE URBAN MOBILITY

- Electric Vehicles
- Charging Infrastructure
- Public Transport
- Land Use & Transport Interaction
- Accessibility
- Intermodality



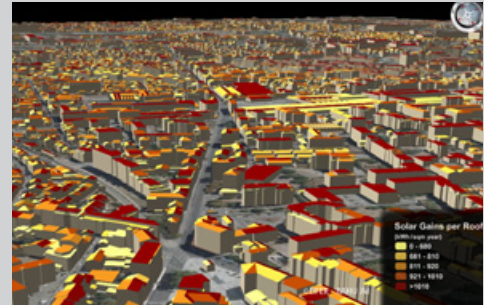
# EDF IS SUPPORTING CITIES WORLDWIDE

■ EDF's 3D tool is used by HDB-Singapore to build the best policies for **more sustainable and liveable neighborhoods**.



*"This is a sophisticated tool that will simulate complex urban scenarios and help HDB planners analyse and determine the best combination of strategies using both design and technological solutions. Ultimately, it will help us create a better living environment that will benefit our residents."*

**Dr Cheong Koon Hean**, Chief Executive Officer of HDB



*"To improve energy production and consumption in the buildings of tomorrow, we have to take urban morphology into consideration."*

■ In France, EDF combined **solar gain calculation** with **urban morphology analysis** to identify the solar footprint of the entire 8th District of Lyon. This was achieved by taking into account building characteristics as well as urban typology. This allowed for the optimization of planning and **refurbishment** decisions, as well as the deployment of **decentralized energy**.

■ In Mulhouse, France, EDF emphasized the benefit of integrating **transport** and **land use** to evaluate overall **GHG emissions**.

Coupling the development of **electric vehicles** with the appropriate local land use and transport policies can lead to an additional 7% decrease in greenhouse gas emissions when compared to the standard electric vehicle development scenario. EDF is also involved in a number of electric mobility pilot projects (e.g.: CROME, SAVE, etc.).



*"Helping cities understand the link between land use and transport leads to a more coherent planning and local policies implementation."*

■ More projects: EDF is also involved in supporting cities in their analysis of the impact of traffic and decentralised energy on **air pollution** and health. Simulation of **waste collection** for energy recovery is also part of EDF's current offer and EDF's energy expertise is being used to bring innovative energy solutions to the **refurbishment** and re-development of non-residential areas.

Find us on: <http://webtvgroup.edf.com/sustainable-cities-video-12265.html>



EDF SA  
22-30, avenue de Wagram  
75382 Paris Cedex 08 – France  
Capital of 930 004 234 euros  
552 081 317 R.C.S. Paris  
[www.edf.com](http://www.edf.com)

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DE LA FORÊT

**Contact:**  
Pascal TERRIEN,  
Director – Sustainable  
Cities Program

**EDF – R&D**  
Avenue des Renardières  
Ecuelles  
77818 Moret-sur-Loing  
France

[pascal.terrien@edf.fr](mailto:pascal.terrien@edf.fr)  
Tel.: +33 1 47 65 47 39  
Tel. mobile: +33 6 26 15 87 49