

DIGITAL URBAN SOLUTIONS

Urban Development

Designs services for cities and territories able to monitor, manage and interact with the urban life

Tractebel is a worldwide multidisciplinary engineering, consultancy and design firm working on a wide range of projects in geographies around the world. Every day our teams of engineers, consultants and designers feel the need for a more sustainable urban development to build a better world for all, today and in the future. Therefore we developed together 11 integrated approaches for cities and territories; they represent the needs and interests of cities and citizens and aim to provide solutions to key global challenges.

why?

The digitalization of urban culture and of public and private sector and industries brings with it new issues and possibilities for digital design, architecture and planning.

Technology innovation and the increasing availability of data regarding city life patterns, provide means to solve global-local challenges (density growth, resource scarcity, climate change, etc.) and to shape a more efficient, inclusive, healthy and user-centered city. As digital is transforming all aspects of people life, **cities are increasingly willing to develop digital solutions as interface with their citizens: a way to improve their service performance, citizens' engagement and quality of life.** They are however facing the challenge to deal with these new technologies and seek support in selecting appropriate solutions and designing the associated services.

what?

Digital Urban Solutions focuses on digital as the key lever to support the development of human settlements, from neighborhoods to cities and regions.

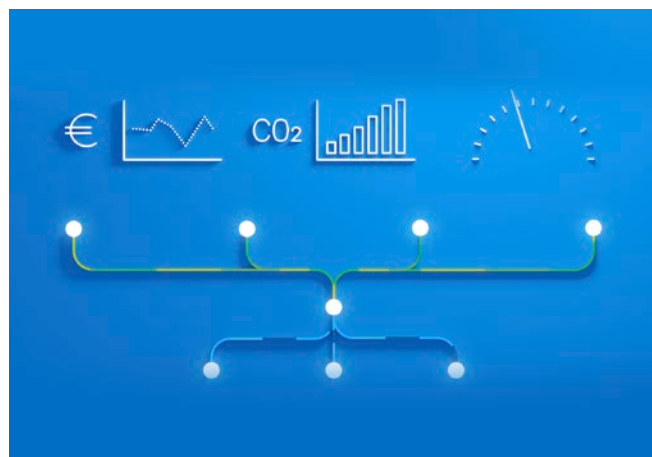
Digital Urban Solutions integrates different disciplines using digital infrastructures (from IT systems to platforms) to design services for cities and territories able to monitor and manage or interact with urban life in a creative, efficient and citizen-centered way.

Digital Urban Solutions apply to many aspects of urban development from **integrated urban planning, to the development of new services platforms** leveraging on the opportunities offered by technologies such as **real time urban data management and optimization, 3D visualization**, etc. Among the new urban services enabled by digital we find citizen engagement, traffic-waste-energy-water management applications, forecasting and decision support systems, cooperative management tools and more.



Plug My Car, Brussels

A strategic study designing disruptive future business models in electric (and autonomous) mobility. A systemic, platform-based business model around EV mobility was delivered, at the intersection of mobility and energy systems



Prosumer

Prosumer is an energy system simulation and optimization tool. It provides the optimal energy investment strategy to meet a given multi-fluid energy demand (electricity, heating, cooling) considering a wide range of technology options (PV, wind, hydrogen, batteries, district heating & cooling, biomass, ...). Prosumer helps harmonize climate change imperatives with business profitability, by designing the investment strategy of a zero-carbon journey.



PlanGridEV, Europe

This study developed new network planning tools and methods for European Distribution System Operators for an optimized large-scale roll-out of electromobility in Europe while at the same time maximizing the potential of DER (Distributed Energy Resources) integration.



360° CITY SCAN

A tool ideally suited for use by city representatives or those involved in city development, whether in urban or real estate, financial, services, or social development spheres. It maps the overall performance of a city - in terms of infrastructure readiness and services efficiency - and so, potential areas for development, from 6 different perspectives.

10 other integrated approaches to discover

- Urban Resilience
- Productive Landscapes
- Places of Mobility
- Water Urbanism
- Eco-Districts
- Recycling Territories
- Smart Networks
- Civic Architecture
- Sustainability @Work
- Territorial Transitions