



EU Energy Day - Clean Energy Solutions for the Buildings of the Future

July 24th, 2017 Astana, Kazakhstan

ASTAINABLE, a 3D Virtual Showcase of the Group's expertise

For the smart and sustainable city

Why this project?



- In the framework of the "fields of excellence" defined by the French Ministry for Foreign Trade in 2013, Astainable is one of the 2 projects selected by the French government in order to promote exports of French companies.
- It is **supported by Vivapolis**, the umbrella brand under which the French government aims at federating French companies and local authorities **to expand on markets of urban development** in emerging countries.
- It also contributes to reinforce economic cooperation between France and Kazakhstan.



What is Astainable?



A 3D interactive tool for urban design, presenting solutions for cities by means of the video game technology

- based on a muti-criteria analysis* and focused on the final usages
- A decision making tool enabling to develop urban planning scenarios for 2030.

First international showcase of French know-how.







^{*}Energy efficiency, renewable energy sources, decentralized energy, water & waste management, green mobility, digital solutions, sustainable construction

Why Astana: an Archetype of Fast Urbanization



City hosting the next International Exhibition (2017), focused on the topic « future energy ».

Territory of **797 km2** for **1 002 900 inhabitants** (June 1, 2017)



+250% in 14 years; +45% expected by 2030



From -40°C to +40°C



Water scarcity: 14 Bcm water deficit by 2030



97% waste is landfilled



Renewable energy sources <1% production Energy consumption x2 by 2030



Congestion: insufficient public transportation (3 bus lines vs. 300.000 vehicles in 2014)
Air pollution





Partners Involved in the Project





+ support of French
« Innovative
Clusters » acting as
door openers to reach
2000 SMEs.



Around 350 solutions for sustainable cities presented

