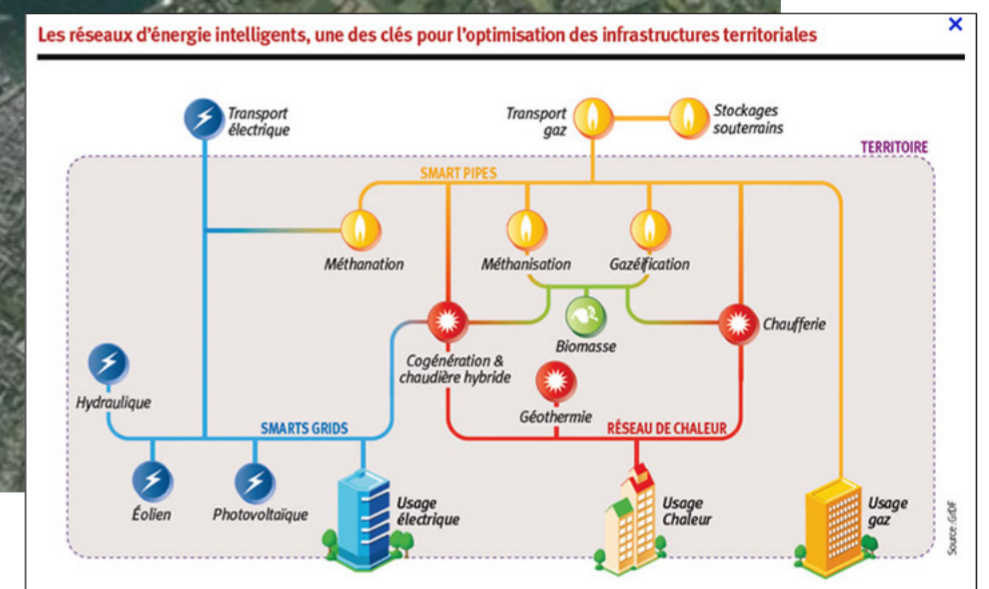
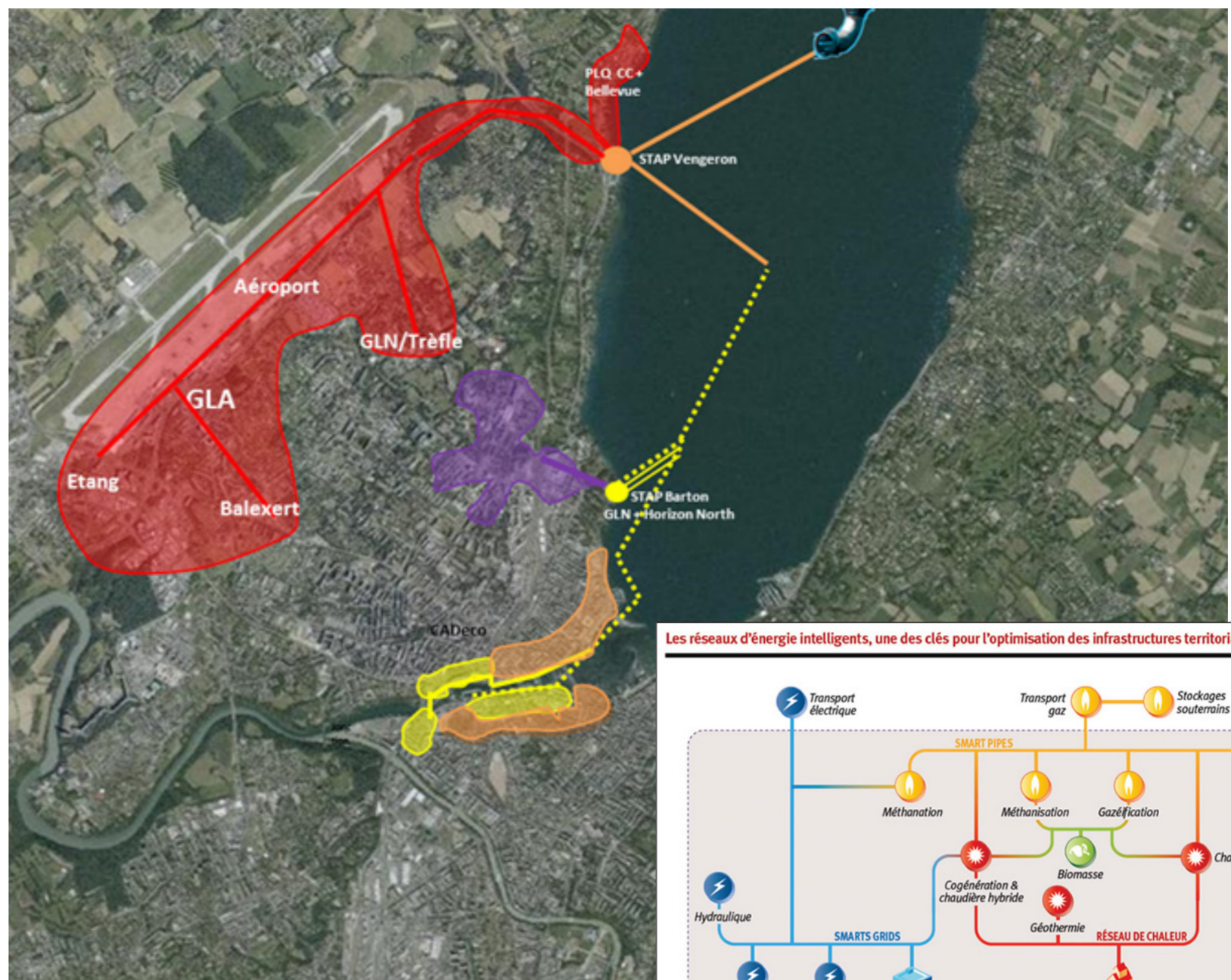


# IntegrCiTy

Nowadays, energy supply networks in cities – natural gas, electricity and heating/cooling – are almost always planned and operated separately from each other. This “silo-like” approach prevents energy utilities and city planners from: a) identifying synergy opportunities among the networks, as to increase reliability and robustness of energy supply, while aiming at increased efficiency and renewables penetration; b) optimally planning heavy infrastructure investments, thus taking into account future energy demand evolutions while avoiding oversizing.

IntegrCiTy’s overall aim is to foster energy networks interoperability either in existing or future urban infrastructures by way of a dedicated decision-support tool, that shall be applied and tested/validated in three Swiss and Swedish cities.



## Aim/objective

- Develop a decision-support IT environment for city planners and energy providers focusing on an integrated approach to multi-energy supply networks
- Implement the IT tool on selected test-cases in partner cities

## Approaches/methods

- Integrate existing tools on energy networks simulation and design in a cosimulation approach
- Validation by test-cases on extension and/or retrofitting of energy infrastructure

## Expected results and impacts

IntegrCiTy co-simulation tool will allow evaluating every energy aspect in an integrated, simultaneous, spatial approach: demand profiles, resources, supply infrastructure, storage and conversion technologies, territorial constraints.

## Involved cities/project examples

- Vevey – Mixed-usage dense city section with new DHN
- Geneva – Airport neighbourhood
- Stockholm - Hammarby Sjöstad

## Comparison of cities in

- Switzerland
- Sweden
- Indirectly in other EU countries by way of parallel ongoing projects

**IntegrCiTy – Decision-support environment for planning and integrating multi-energy networks and low-carbon resources in cities**  
**Duration:** 2016–2018  
**Internet:** <http://integrcity.epfl.ch/>  
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**Budget:** 1.484.776 EUR  
**Partners:** École Polytechnique Fédérale de Lausanne (EPFL), AEE INTEC, AIT Austrian Institute of Technology, City of Vevey, HES-SO Valais-Wallis, KTH Royal Institute of Technology, Centre de Recherches Energétiques et Municipales (CREM), Romande Energie SA, Hoval Austria, Europe Power Solution AB, Office Cantonal de l’Energie (Canton de Genève), Veolia Sverige AB, Services Industriels de Genève (SIG), Holdigaz SA, Riksbyggen, ElectriciTy, City of Stockholm

## About JPI Urban Europe

JPI Urban Europe is a transnational research and innovation programme on urban transition. With the ambition to develop and validate new solutions for sustainable and liveable cities, a cooperation platform and programme is provided to connect urban stakeholders, researchers, cities, business and society

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