

# Energy Microgrid and Energy Storage

Lac-Mégantic, Quebec






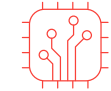



## WSP SMART™ SOLUTION

Lac-Mégantic is looking to rebuild its downtown core, focusing on innovation and sustainable development

## MAKING WSP SMART™ CONNECTIONS

- Implementing a microgrid to integrate solar panels, BESS and charging stations to study new technology before applying it to other locations

## PROJECT OVERVIEW

SECTOR SERVED Public Sector	SOLUTION DELIVERED	FUTURE READY®	
 Infrastructure  Energy & Resources	 Design/Build	 Technology	 Society
		 Resources	 Climate

## PROJECT SUMMARY

After the rail disaster in 2013, Lac-Mégantic is looking to rebuild a future focusing on innovation and sustainable development. As part of the downtown reconstruction, the city has engaged with WSP in Canada to implement a microgrid in Lac-Mégantic as a way of testing the new technology to roll it elsewhere and become a model Smart City.



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The microgrid involves approximately 30 buildings, including institutional, commercial and residential buildings located within the study area perimeter (150,000 m<sup>2</sup>), a solar park (800 kWDC) and BESS (1,200 kWh) connected to the 25-kV MV network and located close to the study area perimeter.

Solar panels, BESS and charging stations on certain buildings will be implemented within the study area along with features like a microgrid controller, building control automation, and microgrid protection and supervision systems.

The microgrid will change and extend the existing 25-kV MV network to connect the energy resources to the existing distribution network

WSP in Canada is also reviewing the state of existing Smart City related technologies that are presently in service or planned for near term commissioning and their capabilities to address any identified Smart City's needs through configuration enhancements or integration with other systems.

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#### WSP SMART™

WSP Smart™ integrates technology, sensors, communication and real-time analytics capabilities with the environment. WSP Smart™ brings new thinking to designing cities, buildings, infrastructure, across the built and natural environment.

#### CONTACT US

For more information on WSP Smart™, please contact [Lucy.Casacia@wsp.com](mailto:Lucy.Casacia@wsp.com)

#### ABOUT US

As one of the world's leading professional services firms, WSP provides engineering and design services to clients in the Transportation & Infrastructure, Property & Buildings, Environment, Power & Energy, Resources and Industry sectors, as well as offering strategic advisory services. Our experts include engineers, advisors, technicians, scientists, architects, planners, surveyors and environmental specialists, as well as other design, program and construction management professionals. With approximately 49,800 talented people globally, and 8,000 here in Canada, we are uniquely positioned to deliver successful and sustainable projects, wherever our clients need us. [www.wsp.com](http://www.wsp.com)