



CityInSight

*A state of the art city-scale energy,
emissions and finance model*



SSG
SUSTAINABILITY
SOLUTIONSGROUP

An aerial photograph of a city, likely New York City, with a large red rectangular overlay in the center. The overlay contains white text. In the top left corner, there is a stylized orange graphic of a city grid. The Empire State Building is prominent on the right side of the image.

THE IMPERATIVE

Cities around the world are increasingly embracing ambitious energy and emissions reduction strategies. This transition to a low carbon and renewable energy future requires ambitious new city policies and major investment decisions in infrastructure. A holistic and rigorous approach is needed to justify these efforts.

HISTORY

SSG developed the first Canadian model, GHGProof, to evaluate existing and potential municipal policies and actions on greenhouse gas emissions and energy almost ten years ago. The modelling approach is unique in that it includes a spatial focus and multiple dimensions, and it is open source (transparent and available to anyone to use for non-profit purposes). The model has guided the development of energy and GHG emissions targets and actions for over 30 municipalities and regional governments in Canada.

v2

SSG has partnered with **whatIf? Technologies**, an international leader in simulation modelling, to increase the sophistication, scope and capabilities of GHGProof in a new model - CityInSight. CityInSight also incorporates the **Global GHG Protocol for Cities**, a GHG accounting framework launched as the new global standard by the World Resources Institute, ICLEI, C40, UN Habitat and others at the UN Conference of the Parties in Lima in 2014.

BIG QUESTIONS

Decarbonisation. 100% renewable energy. Drawdown. Fossil-fuel free. CityInSight is designed to enable cities to explore possible energy and emissions futures scenarios and their implications for policy, finance and infrastructure. CityInSight is designed from the perspective of local government, focussing on their specific spheres of influence including land-use, urban form, buildings, transportation, waste management, district energy and others.



What strategies do we need to implement to eliminate GHG emissions from our City over the long term?



What is the role of land-use in achieving our climate target?



How many tons of CO₂ will be reduced by different city-scale actions?



How many new jobs will the climate action plan generate?



What is the most effective use of resources to reduce energy consumption and emissions?



How will different strategies impact household energy bills?

FEATURES



Open Source

CityInSight will be freely available for non-profit use. This approach ensures that the tool can evolve to address different use cases and maximises the accessibility of the approach to cities and communities of all sizes and income levels.



Data management

Typically, local governments will collect and manage data on their cities to oversee their operations. What data they choose to store, and how they store it, however, will vary from one city to the next. CityInSight accommodates the collection, management, and analysis of data for jurisdictions both with limited and comprehensive records.



Spatial

CityInSight is spatially explicit, considering the impact of patterns of land-use and urban form on emissions into the future using GIS-based platforms.



Elegant results

There are many dimensions to energy and emissions and the analysis is complex. To ensure the results are clear and compelling, CityInSight includes an online and interactive library of charts designed by a specialist in data journalism allowing for rapid debriefing of multiple policy scenarios.



Finances

CityInSight includes an accounting of future energy costs at the household and community scale, the social cost of carbon, marginal abatement curves and employment impacts.

THE PARIS LAUNCH

Following a soft launch in Canada, CityInSight will be announced in Paris during the COP21 meetings in December 2015.

THE TEAM

SSG is a national workers' co-operative with a 15-year track record of innovation in the fields of green building, urban planning and sustainability management systems.

whatIf? Technologies is one of the foremost modelling companies internationally that has developed urban and energy models at the regional, provincial and national scale for more than 20 years.