

re:build

Sunny side up! The City of Calgary's Solar Potential Map

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What was the idea?

- Using location-based data, The City of Calgary created an interactive online map of every building in Calgary, showing the solar potential of each rooftop
- This quick and easy to use tool can search for any address and provides initial insight into the viability of using solar energy to power any home or building in Calgary city limits

How did we do it?

- Between 2012 and 2016, 3D building information was created from LiDAR as a corporate city-wide dataset
- LiDAR is a highly accurate geospatial (location-based) imagery technology that captures elevation data from an aircraft fitted with specialized equipment that flies above the city
- The LiDAR data was converted to other data formats so that it could be visualized on an interactive map

Why did we do it?

- We had the data, but we were only using it for initial assessments of City buildings being retrofitted. We had the online platform and complete city-wide data, so why not share it with the public and The City could continue to use it too!

What did we learn?

- Collaboration is key! We worked with other departments to tell the complete story of solar energy:
- Our environmental specialists and engineers shared info about what Calgary is doing as a leader. An example: a leisure centre has been retrofitted with 600 solar modules on the roof
- Our utility provider explained how citizens can use the map as part of their evaluation process and provided links to more information on how to further evaluate the potential of using solar energy
- We put the raw data on Calgary's Open Data Portal
- Our communications department promoted the map using social media – There were over 20,000 visits to the site in less than three months

Check out Calgary's Solar Potential Map for yourself at maps.calgary.ca

