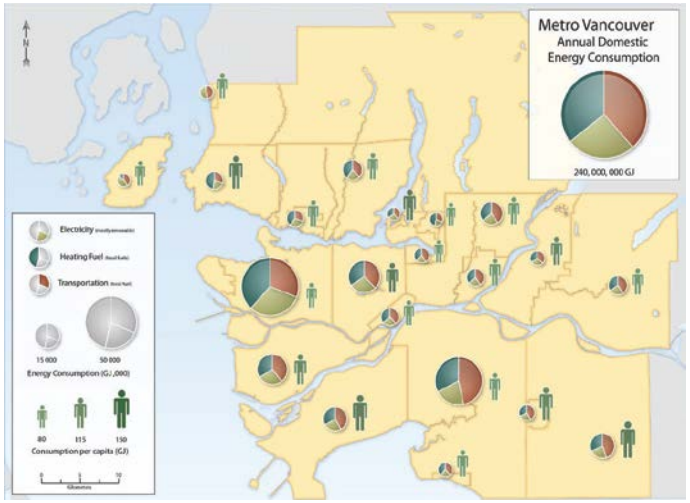
COMMUNITY ENERGY EXPLORER

BUILDING COMMUNITY CAPACITY ON LOCAL ENERGY

Community Energy Explorer (www.energyexplorer.ca) is a unique highly visual web-resource designed to build energy literacy and capacity among citizens, decision-makers, and local government staff on community energy and related land use issues. Community Energy Explorer (CEE) provides integrated and interactive information on the Metro Vancouver region that allows users to explore key concepts of local energy & see their implications for typical communities. CEE is intended to equip its visitors with (basic to complex) information on community energy, while also assisting practitioners in their awareness building and community engagement efforts by providing images, graphics, maps, and other content to improve and streamline presentations, develop workshops, etc.

There is a pressing need to meet municipal and provincial targets for greenhouse gas reduction by transforming our energy systems. For example, many cities in BC in their Official Community Plans have committed to massive (80%) reductions in carbon emissions by 2050, in line with provincial targets. The federal government's Pan-Canadian Framework calls for a low-carbon energy transition and mobilizing Canadians to get involved. Securing community buy-in on new energy policies and behavioural shifts by citizens and businesses has become an urgent priority for concerned governments, however, the BC public has not yet generally woken up to the need.



Energy consumption by municipality (Credit: R. Tooke, CALP)

In this context, enhanced digitally aided processes and tools like CEE are needed to help build awareness and inform decision-making at the local level, through channels such as neighbourhood energy workshops, Community Energy and Emission Plans (CEEPs), and council decisions on proposed district energy plants. CEE is intended to allow users to engage more deeply on unfamiliar but critical land use and energy issues such as density and district heating/cooling, thereby developing a more informed citizenry, helping to overcome barriers and resistance to new policies, and advancing BC communities' leadership in sustainability.

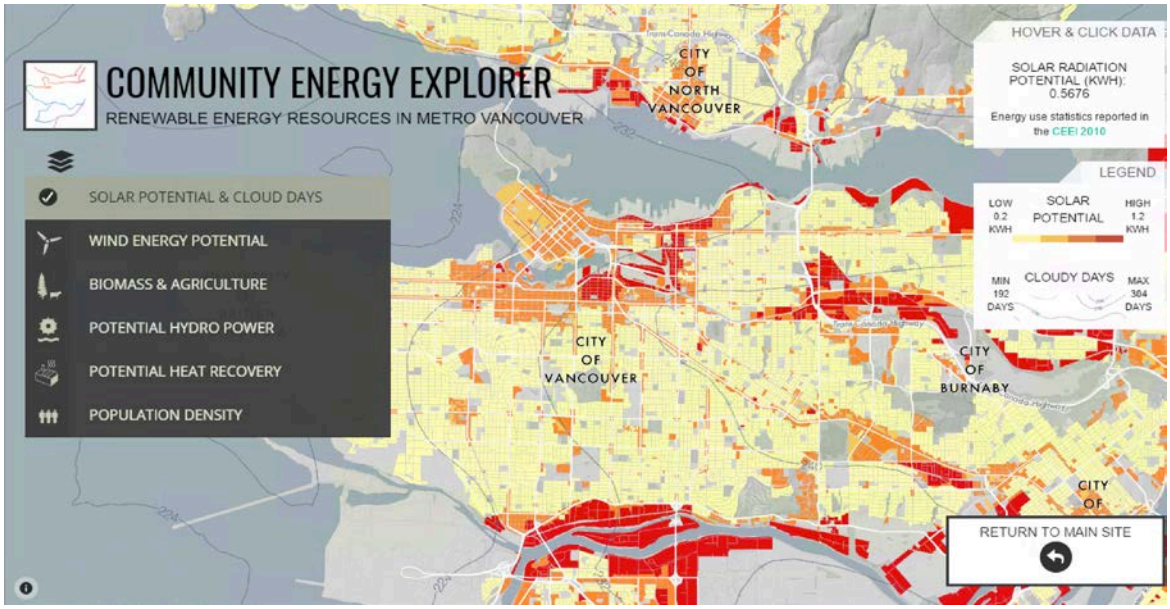
UBC CALP metrovancouver real estate foundation BRITISH COLUMBIA Pacific Institute for Climate Solutions Knowledge. Insight. Action.

Highlights -

- Provides planners and community energy managers with tools and engagement opportunities to help communities learn about and engage in local energy issues.
- Maps the overall renewable energy capacity of Metro Vancouver and its constituent municipalities.
- Makes citizen science and voluntary geographic information (VGI) on energy more relevant and useful for citizens and municipal/local governments.

CEE incorporates various forms of mapping, infographics, videos, and visualisations of future energy scenarios that fill a vital gap in helping communities understand what Community Energy means to them. CEE provides interactive access to several key resources:

- A "Community Energy 101" introduction to various low-carbon energy concepts and sources, illustrated with animations, photographs and 3-D visualizations
- Modelled energy demand and GHG intensity for single family homes across the region
- Local renewable energy mapping for multiple types of supply, allowing the user to see what mix of energy sources can be found locally. Regional results suggest that Metro Vancouver has the potential capacity to provide over one third of its building energy needs from within its boundaries.
- Case studies illustrating different energy options in typical Metro Vancouver neighbourhoods



Renewable energy mapping (solar energy selected) (Credit: R. Tooke, CALP)

The potential for widening the uptake of these tools to educate and engage young people in the field of urban planning for community energy will open up an innovative new pathway for much-needed civic discussions and social learning on the energy choices that communities face.

For more information on CEE, visit www.energyexplorer.ca, or to know about other digital tools on public engagement by CALP, www.calp.forestry.ubc.ca or contact Deepti Mathew Iype, Research Scientist, CALP, UBC at deepti.mathewiype@ubc.ca or 604-822-8912