

GREEN ECONOMY

TARGETS:

- 1. DOUBLE THE NUMBER OF GREEN JOBS OVER 2010 LEVELS BY 2020.
- 2. DOUBLE THE NUMBER OF COMPANIES THAT ARE ACTIVELY ENGAGED IN GREENING THEIR OPERATIONS OVER 2011 LEVELS BY 2020.

Vancouver's green economy is growing more than twice as fast as traditional sectors. The green economy includes jobs in clean technology and products, green building design and construction, sustainability consulting and education, recycling and composting, local food, green transportation, and much, much more.

Green jobs can be found across traditional and new industry sectors. For example, many of the resource-based companies headquartered in Vancouver have sustainability departments, which have created green jobs, as have energy and environment groups at Vancouver's more progressive financial institutions and telecommunications companies. Vancouver's emerging eco-fashion innovators are finding ways to use sustainably produced fabrics and other materials in their manufacturing processes. Many of BC's clean technology companies that are working towards energy solutions such as solar, wind and tidal power, as well as bio-energy technologies, also call Vancouver home.

Green economic development is also about greening all sectors of the economy, encouraging organizations and businesses to make environmentally responsible improvements in their operations. This may mean sourcing recycled, reclaimed or locally manufactured materials, taking steps to improve energy efficiency, or reducing the amount of solid waste that businesses produce.

There's a strong business case for going green. Efforts to increase environmentally sound practices save money, including savings from reduced waste disposal and energy costs. A green company also benefits from access to contracts with organizations that have sustainable purchasing requirements. In addition, companies that recognize the benefits of integrating their business systems internally as well as with other companies and organizations will find opportunities for improved productivity, innovative business processes, creation of shared value, and additional revenue streams.





By embracing green economic development, Vancouver businesses can be more competitive, gain market share, and prepare for carbon regulation, all by improving their environmental performance. Developing Vancouver's green economy is an opportunity and a necessity on the path to a healthy and sustainable future for our city.

BASELINE NUMBERS

Vancouver has approximately 14,900 green jobs in eight sectors, based on 2010/2011 numbers. This makes up more than 3% of total jobs in the city.

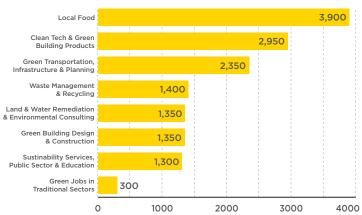
Percentage of jobs in key sectors*

KEY SECTORS	PER CENT OF JOBS
Wholesale & Retail Trade	13%
Health Care & Social Assistance	11%
Tourism (Accommodation & Food Service)	9%
Manufacturing	5%
Public Administration	5%
Construction	4%
Transportation & Warehousing	4%
Green Jobs	3+%

SOURCE: Statistics Canada 2006 and VEC Green Economy Study 2010. Due to overlap of some industry sectors and multiple sources, the data do not sum to 100 percent.

About half of Vancouver's green jobs will likely come from the creation of new jobs that don't currently exist. The other half will come from the transformation of existing jobs through skills upgrading, and through organizations that green their existing business processes and take advantage of new opportunities in the green economy.

Number of green jobs in Vancouver by sub-sector, 2010/2011



SOURCE: Vancouver Economic Commission survey and estimates, March 2010 and April 2011.

HIGHEST PRIORITY ACTIONS

The following are the highest priority actions for 2011–2014. The complete list of Green Economy actions can be found in the *Greenest City 2020 Action Plan* available at **talkgreenvancouver.ca**

- 1. Develop programs to support each of the five green job clusters that the City has identified as priorities. Programs might include research, technology hubs, business incubators, and network development.
- 2. Establish a Green Enterprise Zone. This area would make the Downtown Eastside and False Creek Flats the "greenest place to work in the world" by focusing green companies and organizations, green infrastructure, as well as innovations in building design and land use planning in one location. The lessons learned from this zone would then be applied city wide.
- Deliver a business engagement program. This program can help Vancouver businesses make measurable improvements to their environmental performance and improve productivity and competitiveness.



GREEN JOBS

- green business development officer
- business energy advisor
- green funds manager
- carbon offsets aggregator
- carbon trader
- ICT networking specialist
- smart grid engineer and technician

- smart meter manufacturer
- · green purchasing manager
- demonstration zone coordinator
- industry association director
- policy analyst and researcher
- · sustainability educator

KEY STRATEGIES TO 2020

Doubling the number of green jobs in the City and greening existing businesses will take a coordinated effort. Some of the key strategies to get there include:

Economic development

Economic development by the City and the Vancouver Economic Commission (VEC) will focus efforts on five industry clusters that have the most potential for growth over the next decade. These clusters are: clean technology; green buildings; materials management and recycling; local food; and sustainability services and education, along with other emerging sectors.

Community economic development

The City is working with partners to help create job opportunities and reduce barriers to employment. This is being done through projects that deliver training and supportive employment programs. Examples include EMBERS Green Restoration (a home weatherization service), a building deconstruction program, and urban farming.

Capacity building, education, and training

The City and VEC are continuing to support and participate in a Campus-City Collaborative that offers green workforce development as well as research capacity to support the Greenest City targets. Some projects already underway include City Studio—a program to connect student researchers with critical sustainability questions facing the city, as well as a conference to ensure training offered by local post-secondary institutions matches the need for a growing green workforce.

Greening existing workplaces

The City and the VEC will work with partners to encourage and enable Vancouver companies to improve efficiencies with respect to energy, waste and water; develop innovative management practices such as green purchasing standards; and re-imagine and redesign products and services that give them a competitive edge. This will contribute to the long-term financial health of local businesses, while bringing us closer to our Greenest City targets.

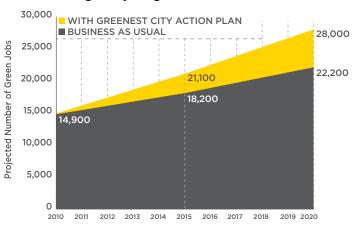
WHAT IT'S GOING TO TAKE TO GET THERE

Our ability to achieve the Green Economy targets will be largely dependent on partnerships with other organizations—particularly businesses, social enterprises, and educational institutions. The City and the VEC can support, encourage and enable green job creation, but the real leadership needs to come from those who are ready to seek out the business opportunities that exist in Vancouver's green economy.

The Green Economy goal is directly connected to the other nine goals, particularly Green Buildings, Zero Waste, and Local Food—areas where many new green jobs are expected.

At least 10% of green jobs have low barriers to employment and are accessible to residents facing language barriers, mental health issues, homelessness, or other challenges. These include jobs in local food, waste management and recycling, and some forms of construction (including home weatherization and deconstruction). Nearly 70% of green jobs require post-secondary qualifications, including technical or trades training.

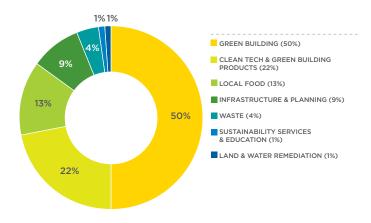
Forecasted green jobs growth



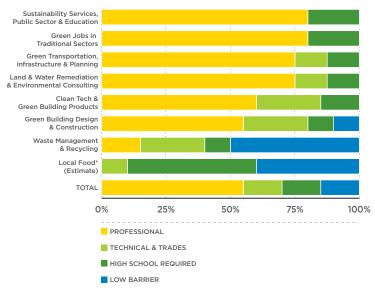
WHERE WILL THE NEW GREEN JOBS COME FROM?

This estimate of sources for Vancouver's new green jobs assumes the full implementation of the *Greenest City 2020 Action Plan* across all 10 goal areas and uses economic forecasts as its base. Though this is far from an exact science, these projections give useful information about where to focus our efforts.

Distribution of additional green jobs generated by 2020, through Greenest City Action Plan (total 10,000+)



Green jobs by training required



CITY STUDIO

Launched in the fall of 2011, City Studio is an innovative program where up to 20 students from Vancouver's six public post-secondary institutions work hand in hand with the City to investigate and generate solutions for issues related to Greenest City goals. The idea for this studio was suggested in the Talk Green to Us community consultation. Originally named "City University," it received so many votes through the website that it finished as the fourth most popular idea.

citystudiovancouver.blogspot.com

SUSTAINABILITY OF THE SOCIAL, ECONOMIC, AND ENVIRONMENTAL KIND

EMBERS Green Renovations is the first business in Vancouver to offer weatherization services to residents who want to lighten their ecological footprint and save money by making their homes less drafty and more energy efficient. It's also a social enterprise that provides training and job opportunities to residents who've experienced barriers to employment and found it difficult to enter the job market.

EMBERS, the Eastside Movement for Business and Economic Renewal Society, began its Green Renovations program in September 2010 with four employees who provided services to 50 homes in the first few months of operation.

With a goal of 5,000 homes by 2020, Green Renovations supports the City's plans to create low-threshold green jobs while also supporting the GCAP's Climate Leadership and Green Buildings goals.

Home weatherization improves the energy performance of buildings by installing low-energy, double-glazed windows, sealing gaps around doors, pipes and wiring, and installing insulation in walls, floors and ceilings. It's estimated that comprehensive home weatherization improvements can reduce up to one metric tonne of carbon dioxide per year per home. That's about one seventh of the annual emissions produced by the average American car.

WHAT IS A GREEN JOB?

This plan borrows from the United Nations Environment Programme (UNEP) definition, which describes green jobs as those that "contribute substantially to preserving or restoring environmental quality... reduce energy, materials and water consumption... decarbonize the economy and minimize or altogether avoid generation of all forms of waste and pollution." Job sectors range from clean technology and green buildings to education and materials recovery. Green jobs also include jobs in traditional sectors with businesses that have significantly greener processes or operations than industry standards.

The GCAP has added local food to the UNEP definition, as growing an urban food system is central to the Greenest City vision for a sustainable economy. Local food is defined here as all food and beverage (including wine) produced and consumed within British Columbia.

