

WILL THE CITY BE MAKING ANY CHANGES IN ITS OWN PROCESSES?

In addition to the programs mentioned, it's important for the City to lead the market by removing barriers to building green. To this end, the City will do an in-depth review of its own municipal policies, by-laws, and processes.

The City has also implemented a Sustainable Building Policy to ensure that buildings built by the City of Edmonton meet the LEED Silver standard.

The City is also evaluating a Green Lease program that would assign a value to the green components included in any building the City is considering leasing.

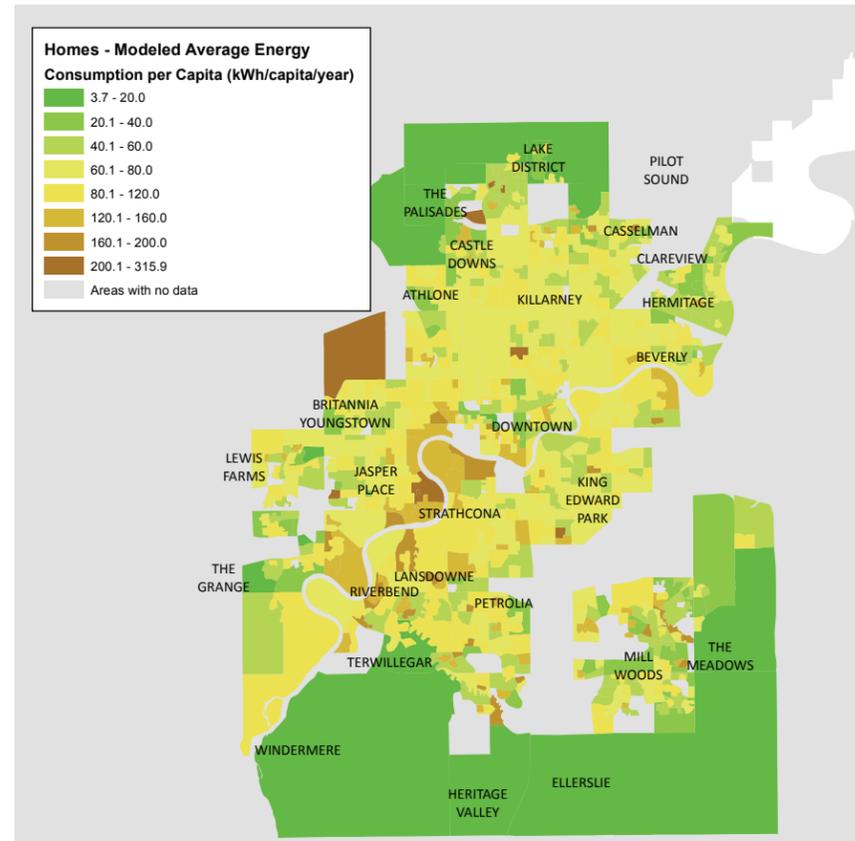
WHY IS RETROFITTING IMPORTANT?

It's estimated that at least 80 per cent of the buildings that will exist in Edmonton in 2050 have already been built which is why retrofitting older buildings to be greener is important.

The map below shows the relationship between home age and energy consumption — older homes use more energy per square metre than newer homes.

Mechanisms and programs are needed to promote energy efficiency retrofits in older homes. These programs will help achieve energy and carbon reduction goals at the community level.

ENERGY USE BY NEIGHBOURHOOD



THE WAY WE GREEN
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GREEN BUILDING PLAN



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For more information on the City of Edmonton's Green Building Plan visit edmonton.ca/greenbuilding



THE CITY OF
Edmonton

WHAT IS MEANT BY 'GREEN' BUILDING?

A green building uses materials and methods that promote environmental quality, economic vitality, and social benefits through the design, construction and operation of the building. Sustainable building practices look at the environmental, economic and social effects of a building. Sustainable design looks at efficient management of energy and water, management of material resources and waste, protection of health and the indoor environment, reinforcement of natural systems, and integrating the design approach.

WHAT IS EDMONTON'S GREEN BUILDING PLAN?

The City of Edmonton's Green Building Plan is designed to work with citizens and industry to green Edmonton's existing and new buildings. The goal of the plan is to improve the environmental, health, and socio-economic performance of all types of buildings in the city: commercial, institutional, industrial, mixed-use, multi-family residential, and single-family residential buildings. This plan has been developed to support *The Way We Green: Edmonton's Environmental Strategic Plan*.



Riverdale Net Zero House

WHY DO WE NEED A GREEN BUILDING PLAN?

Responding to the environmental sustainability challenges faced by Edmonton will require transformational policies and programs. Greening Edmonton's building stock can help address these sustainability challenges by reducing carbon emissions, saving energy, improving water security, reducing waste, enhancing and protecting biodiversity, and creating healthy living and working environments.

Market surveys and research have shown that there are financial and environmental benefits to making buildings more environmentally friendly. If the cost of constructing and operating a building over its lifetime is examined, building green tends to result in financial benefits to the building owners. Also, green buildings can contribute to local economic development.

HOW WILL THE PLAN TRANSFORM THE MARKETPLACE?

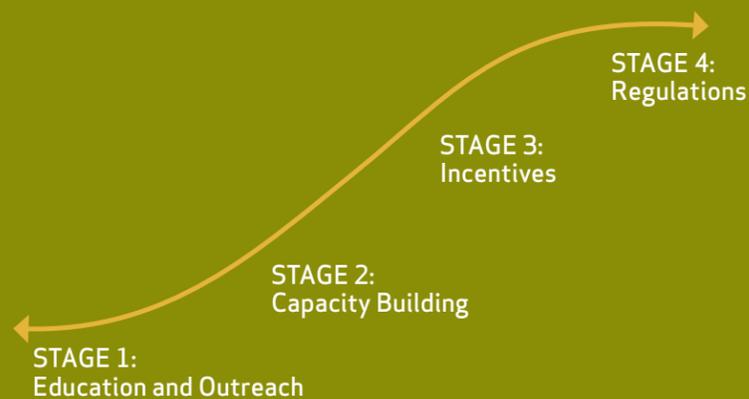
The City of Edmonton worked with subject matter experts and representatives from the development and building industry, real estate experts, and others to create the Green Building Plan. The public was also consulted to gather ideas, feedback and support. The research and feedback the City received shows that Edmonton is in the early stages of green building market transformation so the market is very cautious and sensitive to cost premiums.

Given that Edmonton is an early entry into the green building market, it's clear that, for the Green Building Plan to be successful, it needs to include different ways of encouraging the construction of green buildings. The programs suggested in this plan focus on building capacity in the market, creating demand, and enabling

and promoting green building technology through policy, process and incentives rather than heavy-handed regulation.

In order to ensure the plan can be successful, it was developed with the Market Transformation Theory as its model.

Market Transformation Theory is a model that helps demonstrate how innovations, like hybrid electric cars, are adopted and shared through society and the marketplace. The theory suggests that new technologies or practices will first be taken up by innovators, then early adopters and successively larger percentages of the market as the product or practice becomes more commonplace. The intent of the Green Building Plan is to accelerate this market transformation.



Triffo Hall, University of Alberta



WHAT IS THE ROLE OF THE CITY?

The City of Edmonton can play a strong role in the green building sector through its permitting and development approvals processes. The City also has a track record in public and industry education, incentives, and expanding opportunities in the market.

Policies and programs offered by the City of Edmonton can help overcome barriers to building green which will speed up the adoption of green building practices by industry.

The City can also provide support through education and outreach as well as help define what 'green building' means in Edmonton. This in turn will build industry capacity, provide consistency and efficiency in the planning approvals process, and help create demand.

Through targeted incentives, the City can also improve the business case for building green.

Only when there is sufficient demand in the market and industry can consistently deliver on high performance buildings, would regulations be considered for those builders and developers that have not adapted.

WHAT KINDS OF PROGRAMS ARE INCLUDED IN THIS PLAN?

Edmonton's Green Building Plan will help encourage the uptake of green buildings by establishing the following programs:

- Green Building Checklist — a user friendly checklist and resource guide that would be completed as part of the building or development permit approvals process. The checklist will promote green building practices, build capacity, and provide a way for builders to access incentives provided by the City.
- Edmonton's Green Home Buyer's Guide — Citizens told us they need more information about what to ask for when buying a green home while industry representatives said that demand for green buildings is very low. The information and advice contained in the Green Home Buyer's Guide, as well as a strong marketing campaign, should help create citizen demand for green homes.
- Building Labeling Program — Experts in market transformation indicated that for people to change their buying patterns they need help understanding the value of one product over another. Natural Resources Canada's EnerGuide for Houses is a house labeling tool that shows the energy usage of every home. A municipal program that supports the use of this labeling program will encourage homebuyers to demand more green products.
- Green Renovation Program and Retrofit Guides — Retrofitting is an important part of the green building program. Existing buildings are a large contributor to greenhouse gases and older buildings consume more energy than newer buildings. By working with partners to create a Green Renovation Program and Retrofit Guides, Edmonton hopes to provide valuable, money-saving information for those considering doing green retrofits and renovations.

Building re-commissioning and recognition programs are also being considered for existing and new commercial buildings to help them go green.