



HOUSE OF THE FUTURE

BC Passive House (*passivhaus*) developed a prefabricated panelized system allowing speedier and cost effective construction of ultra low-energy use buildings.

- buildings are prefabricated indoors to maintain quality and control for weather
- the panels meet the stringent *passivhaus* standard, using Canadian materials and design
- the *passivhaus* standard is one of the most efficient design and construction mechanisms to reduce energy consumption in buildings

UTILIZING CANADA'S FORESTS: RESULTS EXPECTED



PASSIVE HOUSE + NON-RESIDENTIAL CONSTRUCTION MEANS:

- **UP TO A 90% REDUCTION** IN THE ENERGY REQUIRED FOR HEATING AND COOLING
- SUSTAINABLE CONSTRUCTION
- INDOOR AIR QUALITY IMPROVEMENTS
- EXCELLENT SOUND INSULATION



FULL-TIME JOBS CREATED

15

INNOVATING WITH WOOD

- off-site prefabrication creates a number of efficiencies such as: increased quality control, reduction in waste, and construction costs and times decreased
- panels arrive on-site, pre-insulated with the option of having windows, doors and siding already installed
- tighter-joined components create better energy outcomes

Awards

Innovation in wood: One of the Governor General's Medals in Architecture
 Architizer Project of the Day — 2015 (Project award)
 British Columbia Wood Design Award, Environmental Performance — 2015

POTENTIAL OPPORTUNITIES

ENVIRONMENT: "WOOD-FIRST" APPROACH USING RENEWABLE, ENGINEERED AND RECYCLED MATERIALS

ECONOMIC: LARGER, MORE COMPLEX BUILDING PROJECTS CAN BE UNDERTAKEN

ENVIRONMENT: REDUCTIONS IN ENERGY USE AND GHG EMISSIONS DUE TO HIGH EFFICIENCY, WOOD-FIRST CONSTRUCTION METHODS



BC PASSIVE HOUSE HAS PRODUCED AND INSTALLED AWARD WINNING BUILDING PRODUCTS FOR A WIDE VARIETY OF RESIDENTIAL AND COMMERCIAL PROJECTS

PROJECT LOCATION:
 PEMBERTON, BRITISH COLUMBIA

These prefabricated panels combine Canadian wood and wood by-products with advanced design, superior insulation and increased air tightness to create ultra-low energy use buildings.

— Matheo Dürfeld, CEO
 BC Passive House

Investments in Forest Industry Transformation Program: In 2010, Natural Resources Canada's Canadian Forest Service created the Investments in Forest Industry Transformation Program (IFIT) to support Canadian companies to develop and grow markets for new and innovative high-value products using Canada's forest resources. *For more information www.nrcan.gc.ca/forests/federal-programs/13139*

Cat. No. Fo4-76/2016E-PDF (Online) ISBN 978-0-6600-6887-9

Aussi disponible en français sous le titre : La maison du futur

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