



The Eco Healthy Homes Project

Making sustainable attainable...

Harmony Habitat is a unique [non-profit](#) company formed to help reduce the harm, pollution and waste associated with home building. We are a small group of volunteers with a big vision - supported by a growing group of expert collaborators.

The need for affordable, healthy, long lasting and resilient housing; healthy jobs; locally reliant economies; and responsible manufacturing; has never been greater. Harmony Habitat's Eco Healthy Homes Project is a five phase strategic plan to help accelerate positive change in housing by developing and sharing replicable eco-building and land sharing innovations.¹

At Harmony Habitat, we believe in a science-informed, deep green approach to home building that transcends energy efficiency and supports benefits for our households, our communities, and our environment, by design. This project is uniting collaborators in health and building sciences, building regulations, community economic development, public and industry education, cooperative economics, financial services and communications. Together we will model a path to making deep green homes more accessible and more affordable.

Our concern Most building products have hidden health and environmental consequences from manufacturing through to disposal. Related costs are passed on to workers, society and homeowners. Furthermore, most homes waste energy and water, are short-lived, and leave households unnecessarily vulnerable to the effects of chemical-off gassing, mold, high repair bills, service outages, wind, and earthquakes.

Our inspiration The thousands of tonnes of product that go into each home represent an enormous opportunity for meaningful positive change. Designed to work with nature's laws, deep green homes can harvest heat, light, energy and water from nature; offer comfort in extreme weather; reduce losses in earthquakes; provide durable strength and beauty; ensure low maintenance, long-term affordability; and contribute to a greener, more just supply chain.

Building change Currently, deep green home building is impeded by a labyrinth of technical, building code, supply, and cost barriers and the risks of experimentation. Hiring an expert research team and consultants is complex and costly. In addition, extra effort is required to help consumers, lenders, appraisers and institutions understand how to measure the value of deep green homes. To help reduce these conundrums, as an independent solutions-focused organization, Harmony Habitat is gathering all the stakeholders to collaborate towards a common cause for mutual benefit.

¹ *A two partner land sharing model forms a second component of the project and is temporarily on hold.

Applied research and demonstration - Phase 2

The Eco Healthy Homes strategic plan is based on our *Phase 1* [industry review](#) of the problems and possibilities in today's housing industry. We are now preparing for *Phase 2*, a demonstration of small deep green design and construction on Gabriola Island. A privately-owned, customizable, [550 sf research home](#) will be developed with a deep green integrated design approach. Products will be carefully assessed for their lifecycle impacts, regional availability and ease of use using familiar construction methods. Design will be guided by Living Building Challenge and Passive House, and unique criteria for household and community economics, resilience and replicability. The efficiency target is Net Zero Ready (Step Code 5). A corresponding publicity campaign will cultivate awareness and market demand for deep green. Documentation of the entire process will support analysis and educational communications in phases 3-5.

Testing, replication and sharing - Phases 3-5

In *Phase 3* we'll test the home, analyze all data collected to date, and continue raising awareness about the economics of, and benefits of, deep green homes. In *Phase 4* we will develop an online whole-home [design portal](#) to enable any builder to customize a deep green home design up to 1000 sf. It will spare builders the investment and risk of original innovation. Following replication in our pilot communities, we will share the program with additional communities. In *Phase 5* we will forge regional networks of Eco Healthy building professionals and suppliers and use the portal to connect them to for knowledge sharing and cost reduction strategies. The networks will multiply change in participating communities and mutually support Harmony Habitat's research, outreach and educational marketing.

Project Support

Our volunteers have been developing the organization and Eco Healthy Homes Project planning with funding from our volunteer co-director, Tatha Cornish and support in the forum of in-kind professional contributors. As the demonstration phase requires land and construction funding, the research house will be a collaboration. Tatha Cornish will provide the land; construction costs; long-term shared use of the home for research and demonstration; a location to build the Harmony Habitat - owned modular office; and full project support. In pursuit for the research, documentation, project management, and communications components, we are expanding our technical and volunteer networks and exploring sponsorships and partnerships with universities, non-profits, and professional firms.

Building Eco Healthy change together

We believe this project has the potential to advance an essential transition in the home building industry, to reduce building related pollution and harm, and to better prepare households and communities for global economic and environmental uncertainty. If you'd like to participate or support this work in some way, please get in touch - and/or please see the [volunteer page](#) for current opportunities.

[7 1/2 minute video and project page](#) [Gabriola pilot project info](#) [builder's design resource](#) [five phases](#)
[research and demonstration home](#) [collaborators](#) [advisors](#) [directors](#) [letters of support](#)
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