

Materials & Resources

COMPONENT GOALS

01

UBC will prioritize the use of building materials that have net positive environmental impacts.

02

UBC will support marketplace transformation by designing buildings with materials that are not harmful to human and ecological health.

03

UBC will support the development of the circular economy by promoting the adaptation, reuse and recycling of materials and products during a building's lifetime.

CONTEXT

UBC has policy in place to reduce the environmental footprint in its material choices, the handling of these materials and the waste products generated during construction and occupancy (REAP).

To work towards the materials and resources component area goals, policy will need to be implemented incrementally over the GBAP time frame to update materials credits to current practice and improve over time.

Pathway to Net Positive

By shifting material choices based on environmental and health impacts, UBC can continue to reduce the negative environmental and health impacts of the University's buildings and play a significant role in moving the marketplace towards net positive impacts.

The entrance sequence features a glulam structure, the beams and columns are locally manufactured.

PHOTOGRAPHER: PHILIP BERTOCCO





The Yu Building is clad in brick which is a highly durable material

ARCHITECT: PERKINS+WILL

Key Directions

The GBAP will require material transparency through environmental product declarations and will prioritize materials with reduced environmental impact and low levels of embodied carbon. The GBAP will develop an approach to identifying and eliminating building materials considered harmful to health based on reviews of best practices and a market supply analysis.

FIVE-YEAR IMPLEMENTATION PLAN — SHORT-TERM PRIORITY ACTIONS

- Develop guidelines for building materials considered harmful to health in their use or manufacture, based on best practice review, stakeholder engagement and consideration of market supply.
- Require incremental reductions in environmental impact of building materials, based on pilots, best practice review and market readiness study.
- Implement design service life requirements for new construction projects.
- Create an integrated policy for building materials that considers reduced environmental impact, healthy material requirements and life cycle analysis.

TARGETS AND INDICATORS

Target: Eliminate 100% of UBC-identified building materials in new construction that are known to be detrimental to human and ecological health by 2035.

Target: Require all new buildings to be Zero Waste Ready¹⁹ by 2020.

Target: Divert 100% of construction and demolition waste from landfill by 2035.

¹⁹ Buildings fully meet the most recent version of the Recycling Infrastructure Guidelines for UBC Buildings and the UBC Technical Guidelines related to waste and recycling requirements.