



Sustainability *by* Design

City of North Vancouver

100 Year Sustainability Vision

Welcome



Workshop Agenda

Project Overview + Workshop

SxD and Principles for Sustainable Communities

Break

Workshop groups for Goals + Objectives

Plenary

Thank you + Next steps



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100 Year Sustainability Vision

Project Overview



Project Overview

PROJECT SCOPE

- Plan for long-term horizon
- Sustainability & Liveability
- Carbon neutrality



Project Overview

PROJECT VISION

To be a vibrant, diverse, and highly livable community that provides for the social and economic needs of our community within a carbon neutral environment by the City's 200th Birthday in 2107.

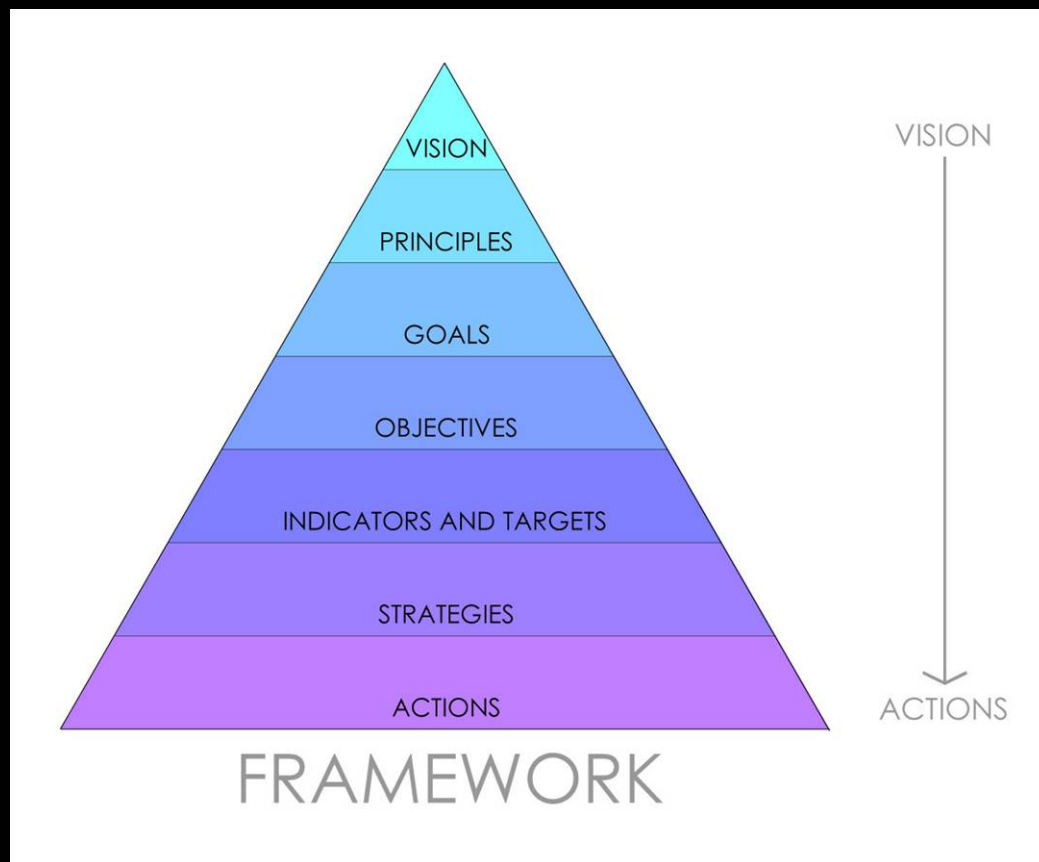
Project Overview

PROJECT META-TARGETS

- To achieve zero net greenhouse gas (GHG) emissions by 2107
- To reduce GHG by 80% below 2007 levels by 2050
Province of BC: Greenhouse Gas Reduction Targets Act (Nov. 2007)

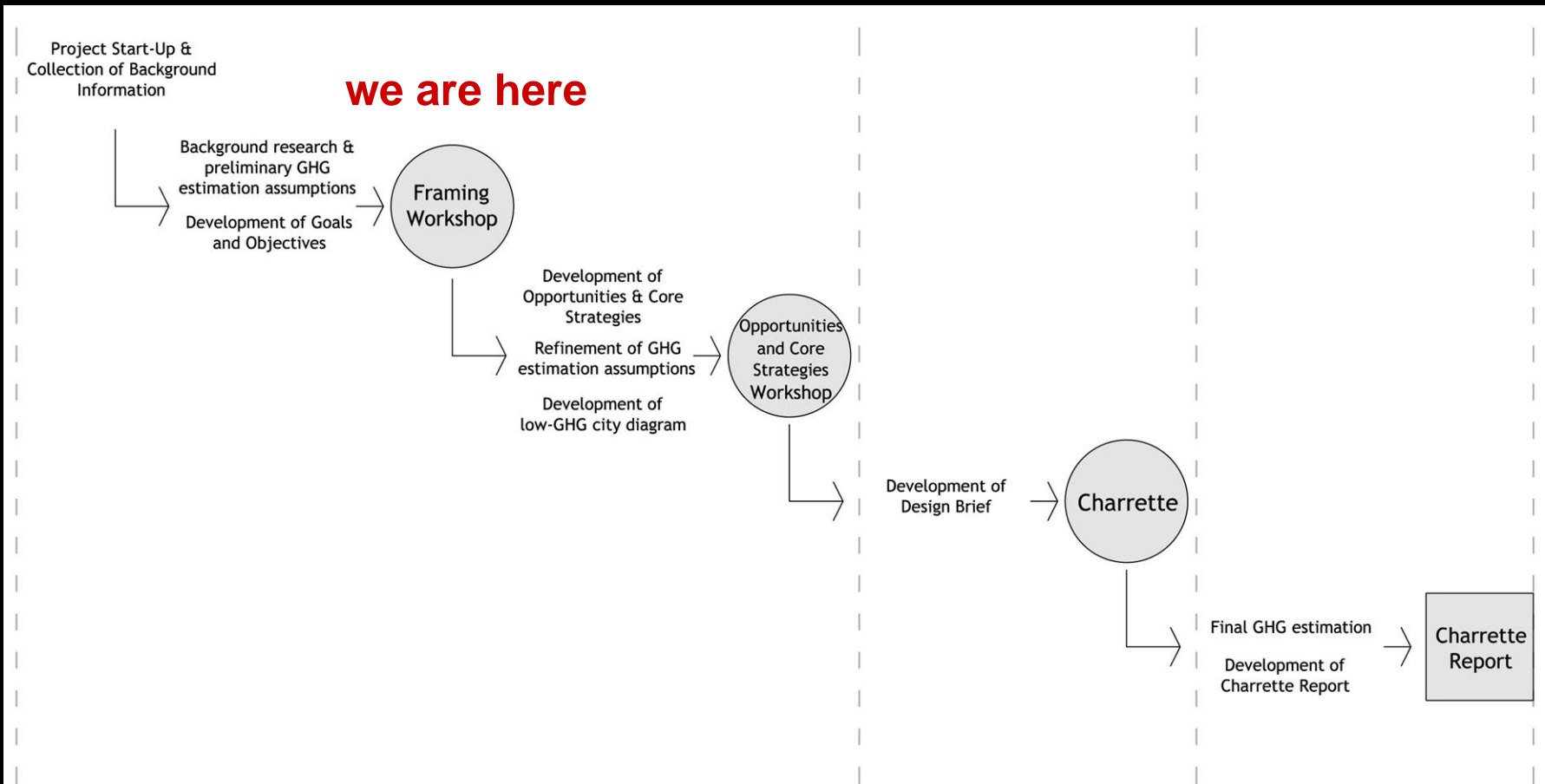
Project Overview

DECISION SUPPORT FRAMEWORK



Project Overview

PROJECT PROCESS



	PHASE 1	PHASE 2	PHASE 3
MAJOR DELIVERABLES	<ul style="list-style-type: none"> · Background research summary · Charrette team list · Goals and objectives document · Preliminary GHG estimation assumptions list · Preliminary GHG estimate of existing conditions · Preliminary low-GHG city diagram · Opportunities and core strategies document 	<ul style="list-style-type: none"> · Charrette Design Brief · Charrette outputs (maps, diagrams, and sketches) · Charrette presentation 	<ul style="list-style-type: none"> · GHG estimate for existing and future conditions · Charrette Report



Sustainability *by* Design

City of North Vancouver

100 Year Sustainability Vision

Framing Workshop

Framing Workshop

OBJECTIVES

- To refine the **Goals + Objectives** for the City's 100 Year Sustainability Vision
- To refine the **Key Issues** that will frame the City's 100 Year Sustainability Vision

Framing Workshop

MATERIALS + CHOREOGRAPHY

- Break out in 3 groups (2-3 Principles / group)
- Group discussions
- Report back to plenary

City of North Vancouver 100 Year Sustainability Vision

Design Principle 1 | Appropriate housing for all

Proposed Goal *To promote sustainability by providing a range of housing types in every neighbourhood to accommodate all age and income demographics.*

Low GHG communities are comprised of sustainable neighbourhoods that offer a variety of housing choice in type, tenure, affordability and accessibility. Providing different housing types, including smaller unit sizes and flexible building spaces, assists in meeting diverse housing needs that change over time. A mix of housing types and tenures (market, non-market), at various densities, reflects the full range of cost and rent levels of a community. Locating housing in close proximity to shops and services contributes to the reduction of GHG emissions by minimizing residents' dependencies on the car. Developing housing that is supported by community energy systems and renewable energy sources ensures energy efficiency. More compact housing types consume less energy and support community energy systems. (OCP Goals & Objectives: 5.7.1; 5.7.2; 5.7.6; 8.5.2; 8.5.5; 8.5.6; 8.7.3; 8.7.4; 8.7.5)

Sample Design Objectives

- Establish relative proportion of housing types required based on demographic trends.
- Maximize the intensity of homes at key nodes, supported by transit and pedestrian and cycling amenities.
- Increase the mix of housing types within neighbourhoods, blocks, parcels, and buildings.
- Encourage building typologies aimed at increasing access and affordability.
- Encourage green buildings and housing retrofits that introduce renewable energy or support the community energy system.

Key Questions

Population

The City's 2006 population was 45,165. Considering current growth rates from the last five and ten years, the population by 2107 would be somewhere between 75,000 and 105,000. Is this a reasonable basis for framing the discussion of a 100 year vision for the City?

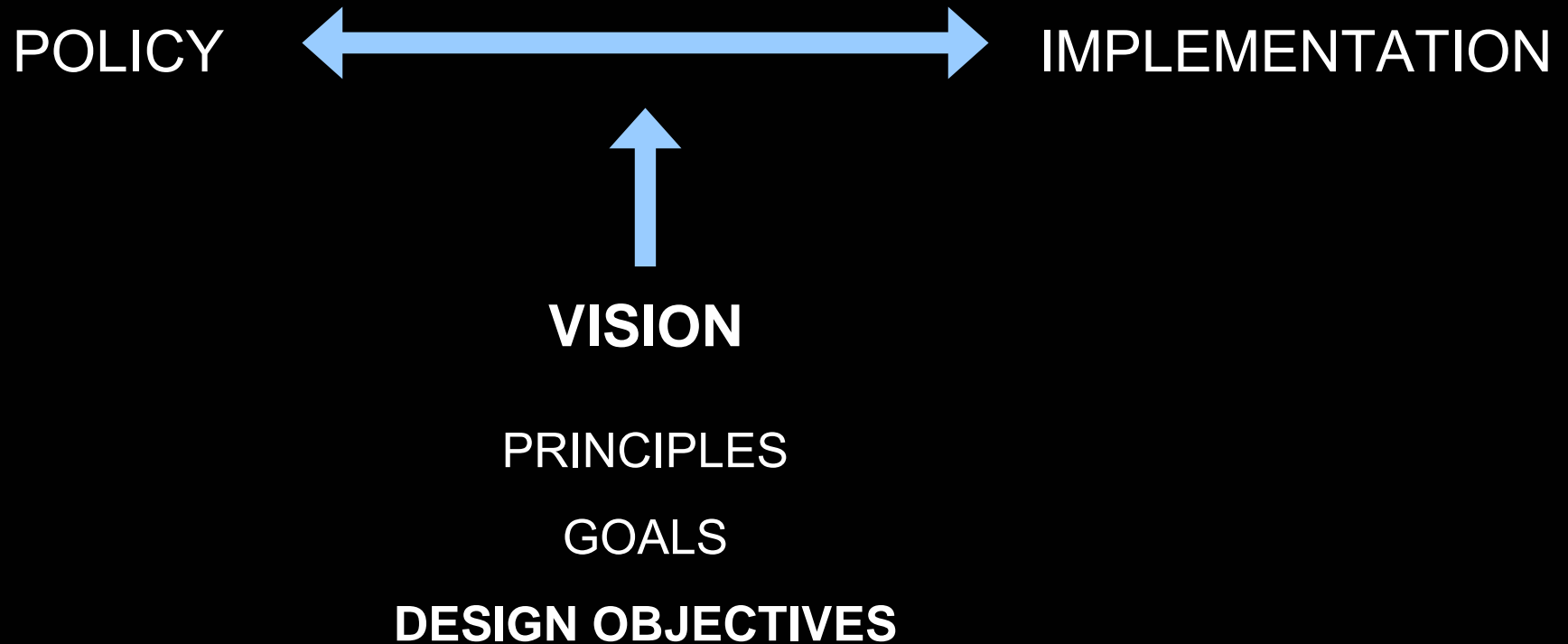
Housing

The City's 2006 housing stock was comprised of 22,643 dwellings. Single detached housing, semi-detached, row houses, and duplexes, combined, represented almost 40% of these. Apartments in less than five storey buildings represented over 40% and apartments in buildings over five storeys represented less than 20%. What changes in housing types and tenures (market, non-market) would need to happen to affordably accommodate the projected population for the 100 year vision?



Framing Workshop

DESIGN OBJECTIVES



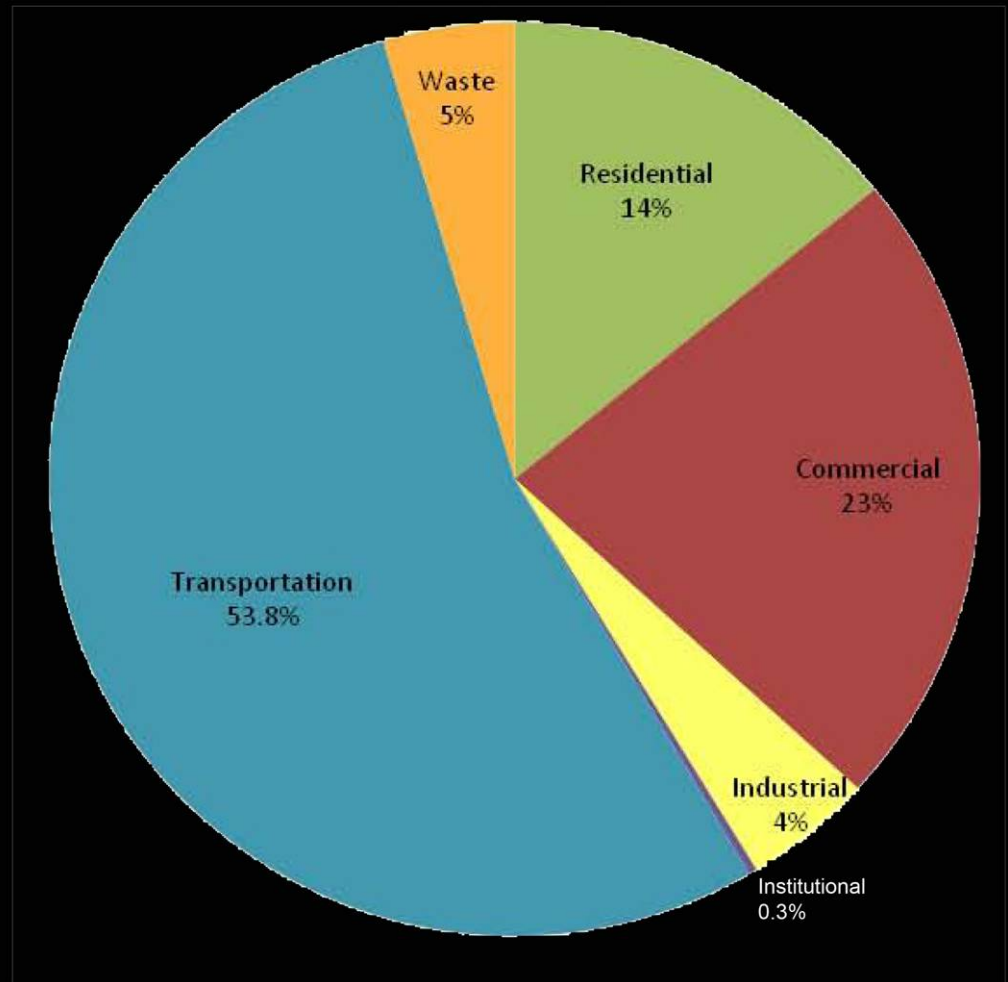
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KEY FRAMING ISSUES

- Population
- Housing
- Land Use
- Natural Areas
- Climate Change
- GHG Emissions
- Employment
- Transportation
- Infrastructure

Framing Workshop

CURRENT GHG EMISSIONS



2006 Community GHG Emission Profile

Source: CNV Municipal & Community
Greenhouse Gas Inventory, Update 2006.

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POPULATION KEY QUESTION

The City's 2006 population was 45,165.

Considering current growth rates from the last five and ten years, the population by 2107 would be somewhere between 75,000 and 105,000.

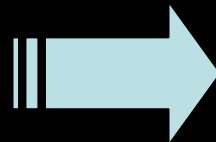
Is this a reasonable basis for framing the discussion of a 100-year vision for the City?

Framing Workshop

WORKSHOP INPUTS + OUTPUTS

INPUTS

- Project Vision + Meta-Target
- SxD Guiding Principles for Sustainable Communities
- Preliminary Goals + Objectives
- Preliminary key issues to frame the project



OUTPUTS

- Refined set of Goals + Objectives
- Refined set of key issues

Questions...



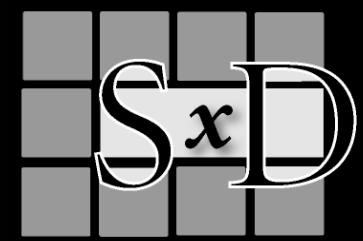
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City of North Vancouver

100 Year Sustainability Vision

SxD Guiding Principles for Sustainable Communities

What is SxD?



SxD is a collaborative effort between municipal officials, researchers, citizens and local stakeholders. Our goal is to produce a compelling visual representation of what the Greater Vancouver region might look like in 2050 at the neighbourhood, district, and regional scales.



Neighbourhood



District



Region

Guiding Principles for Sustainable Communities

- Principle 1 | Appropriate **HOUSING** for all
- Principle 2 | Good and plentiful **JOBS** close to home
- Principle 3 | Mixed use **CORRIDORS** accessible to all
- Principle 4 | Five minute **WALKING** distance
- Principle 5 | Access to linked **PUBLIC PLACES, PARKS**
and **NATURAL** areas
- Principle 6 | Green, durable, timeless **INFRASTRUCTURE**
- Principle 7 | Climate change **ADAPTATION**

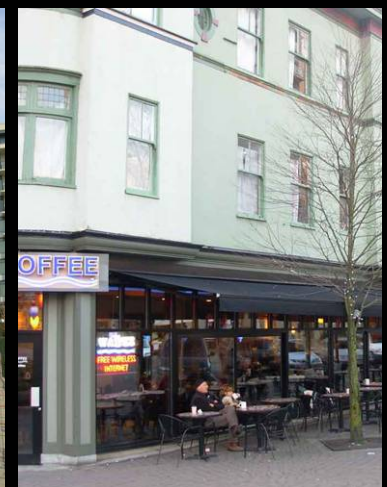
Principle 1 | Appropriate HOUSING for all

Low GHG communities are comprised of compact neighbourhoods that offer a variety of housing choice in type, tenure, affordability and accessibility.

→ Higher housing densities will reduce GHG emissions

Proposed Goal:

To promote sustainability by providing a range of housing types in every neighbourhood to accommodate all age and income demographics.



Principle 2 | Good and plentiful **JOBS** close to home

Low GHG communities foster diverse local economic opportunities and growth from which residents can find work close to home.

→ A close proximity between jobs, housing + transit will reduce GHG emissions

Proposed Goal:

To foster sustainability by maximizing the number and types of jobs for its residents throughout the community, both in and near homes.



Principle 3 | Mixed use **CORRIDORS** accessible to all

In sustainable communities residents live, work, shop and play in their neighbourhood. Vibrant mixed-use corridors provide commuter mobility as well as access to commercial services and daily activities.

Proposed Goal:

To support sustainability by providing walkable, transit-supported and mixed-use commercial corridors.

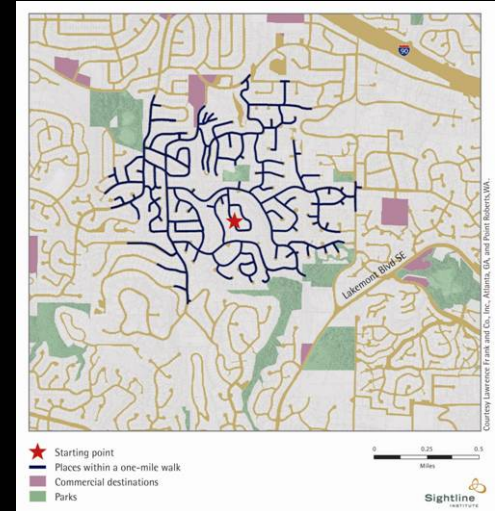


Principle 4 | Five minute **WALKING** distance

Neighbourhoods in sustainable communities are compact – with an interconnected transportation network, quick and easy access to amenities as well as commercial and public services is ensured.

Proposed Goal:

To promote sustainability by ensuring citizens live within walking distance to jobs, goods, services, and open spaces.



Principle 5 | Access to linked PUBLIC PLACES, PARKS, and NATURAL areas

Low GHG communities promote a high-quality public realm that knits the community together, is designed to best serve the community, and celebrates its natural environment.

Proposed Goal:

To foster sustainability by ensuring access to an attractive, safe, and interconnected public realm for all citizens.

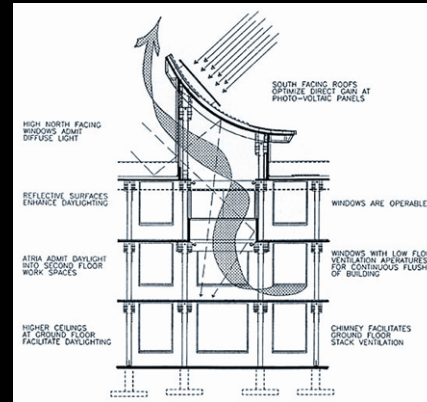


Principle 6 | Green, durable, timeless INFRASTRUCTURE

Low GHG communities optimize the economic, social, and ecological impacts of buildings and infrastructure.

Proposed Goal:

To support sustainability by providing buildings and infrastructure that have longer lifecycles and a reduced impact on the environment.



Principle 7 | Climate Change ADAPTATION

Adaptation strategies support urban systems that are resilient to climate change impacts while maintaining a high quality of life for citizens.

Proposed Goal:

To advance sustainability by ensuring adaptation and resiliency to potential challenges in a way that does not compromise citizens' quality of life.



Thank you

