POWERS & PRACTICES TO ACHIEVE WATER & ENERGY CONSERVATION IN DEVELOPMENTS

THE CANADIAN PERSPECTIVE

BY ALYSSA BRADLEY YOUNG, ANDERSON
YOUNG, ANDERSON
Municipalities in British Columbia have broad powers to require and encourage water and energy conservation in new developments.
ENERGY CONSERVATION OBJECTIVES

- Wind power
- Solar electrical heating and cooling
- Maximum daylight in design
- Maximum natural ventilation and cooling
- Insulating buildings
ENERGY CONSERVATION OBJECTIVES

- Planting of trees for shade, protection and temperature control
- Solar/ground thermal water heating
- Bike paths and free community bikes
- Walking distance to commercial services

YOUNG, ANDERSON
WATER CONSERVATION OBJECTIVES

- Water run-off retention
- On-site rainwater capture and reuse
- Water efficient toilets, fixtures and appliances
B.C. BUILDING CODE

- Mandatory building standards in B.C.
- Province is “greening” Code:
  - Amendments regarding energy and water efficiency:
    - Insulation standards
    - Heating, refrigeration and air condition standards
    - Low flow toilets and water saving plumbing fixtures
IMPOSE REQUIREMENTS FOR ALL DEVELOPMENTS

- Official Community Plan
  - Statement of objectives and policies to achieve water and energy conservation
  - Development permit areas
  - Development approval information areas

YOUNG, ANDERSON
Designate in OCP to promote water and energy conservation
- owner must obtain permit before
  - Land can be subdivided
  - Land can be altered
  - Building can be constructed or altered
Issuance of permit may include requirements and conditions respecting:

- Landscaping
- Siting of buildings
- Form and exterior design of buildings
- Specific features in the development
- Machinery, equipment and systems external to buildings
Development Approval
Information Areas

- Designate areas in OCP
- Require developer to provide information on the anticipated impact of the development on the community

YOUNG, ANDERSON
IMPOSE REQUIREMENTS AT “TRIGGER STAGES”

- Subdivision
  - Approving officer can require study on the subdivision in respect of anticipated energy and water consumption
  - Approving officer can refuse subdivision plan if does not conform to OCP or other bylaws
Rezoning

- Discretionary power
- Require developer to achieve certain standards such as LEED
IMPOSE REQUIREMENTS AT "TRIGGER STAGES"

- Covenants
  - Require at subdivision or rezoning
  - Imposes on-going commitment
  - Register on title to land
IMPOSE REQUIREMENTS AT “TRIGGER STAGES”

- Covenants
  - Restrictions or obligations regarding:
    - The use of land or a building
    - The construction of a building
    - The subdivision of land
- Useful to monitor and ensure continued effectiveness of program
**INCENTIVE BASED**

- Phased Development Agreements
  - Enter into agreement with developer
  - Terms and conditions agreed to by developer including:
    - Specific features of the development
    - The registration of covenants
Development Cost Charges
- Impose on a person who obtains approval of subdivision or building permit
- Help pay for costs of services
- May waive or reduce for developments designed to result in a low environmental impact
INCENTIVE BASED

- Fast Tracking
  - Fast-track certain types of development permit and building permit applications based on energy and water conservation features
- Off-Street Parking
  - Reduce parking spaces required based on energy and water conservation features
CONCLUSION

- Broad powers in B.C. to require or encourage water and energy conservation in developments
- Mandatory or incentive based
- Fairly new powers just starting to be used by municipalities

YOUNG, ANDERSON