Buildings & Energy

Most Relevant Goals

- improve air quality
- reduce carbon emissions and fossil fuels
- protect and preserve water
- energy efficiency
- self-sufficiency through renewable energy
- accessible, affordable safe housing
- health & wellness
- safety & security
- fiscally responsible
- sustainable economy

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Existing Strategies

Buildings - Energy Incentive Pilot Program

- Home Energy Labeling Pilot Project: $75 rebate to home sellers for energy audit; run by BC Northern Real Estate Board, CHBA and Hometech
- New Home Energy Efficiency Rebate Pilot: $3500 to $7500 to reach Built Green with Energuide 80 to 82

BC Hydro pilot community project (with Environ)

- Eenergy/GHG opportunities and savings for small/med businesses

Clean Air Bylaw with respect to Woodstoves

- New installations must meet Cdn/EPA emissions standards; exchange program in last year of provincial funding
- Corporate Strategic Plan: amend in 2010

Energy and Greenhouse Gas Management Plan

- Proposes a broad set of strategies across community and corporate sectors

Community Energy System for Downtown

- Corporate Strategic Plan – 2010: funding, DES partners, environmental assessment; implementation in 2011

Current energy projects

- UNBC Biomass Gasification project; BCR plant (wood waste to hydro), Alterna biomass energy project, Canfor co-gen

SGOG Downtown Prince George Concept Plan

- High-performance, adaptable buildings with vegetated exteriors
- Catalyst downtown energy system(s)
- Clean and renewable energy sources

Current green building projects

- Hospital addition and College of New Caledonia building

Comments and additions:

Implications

Effectiveness:

- building incentive program takeup has been very limited
- buildings account for 58% of community emissions, with 2/3 of energy and most emissions coming from gas
- air quality progress: Into year 3 of exchange program, getting old woodstoves exchanged
- solar energy: limited implementation to date – perception of lower potential?
- initial results from BC Hydro project forthcoming

Future Risks:

- consider need for backup energy supplies if local renewable sources fail
- potential for varied service provision if more players are in the market
- if building costs increase, this could lead to lower affordability

Infrastructure

Most Relevant Goals

- reduce carbon emissions and fossil fuels
- reduce waste landfilling
- protect and preserve water
- protect natural habitat with sustainable forestry and increased green space
- sustainable economy
- carefully budget needs
- flood protection
- community identity

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Existing Strategies

Regional Solid Waste Management Plan (updated 2008)

By 2012

- Curbside recycling, disposal bans on cardboard, recyclable paper, metal, motor oil
- An extensive promotion and education campaign
- A diversion rate of 35% will be achieved

By 2015

- A diversion rate of 50%

City of Prince George

- Dropoff depots for recycling

Corporate Strategic Plan

- 2010 - develop solid waste reduction plan in partnership with RDFFG (including curbside evaluation), with 2011 implementation

City of Prince George Water Conservation Plan

- Metering for ICI, multifamily with volume pricing
- Volunteer residential single family metering was started
- Sprinkling restrictions

Wastewater Treatment Plant

- Energy recovery from biogas; centrifuge upgrade
- Biosolids: had been going to farms, discussion about other options
- Corporate Strategic Plan: 2010-2011 - flood mitigation projects
- Some stream and outfall sampling

Asset management: Corporate Strategic Plan

- 2010: complete asset inventory

SGOG Downtown Prince George Concept Plan

- Green streets including stormwater management
- Winter city design for public realm

Subdivision and Development Servicing By-law

- Addresses stormwater infrastructure for new land development: being updated
- Watershed drainage plans being completed in next several years

Comments and additions:

Implications

Effectiveness:

Solid waste

- existing solid waste diversion rate is about 21% (relatively low)
- RD handles most solid waste issues

Water

- residential water use is relatively high (over 500 litres/person/day reported in 2005

Stormwater:

- water quality in creeks and rivers is a concern; runoff quantity/ flooding is also a concern
- in last 5-10 years, more development encouraged to utilize groundwater recharge

Future Risks:

- with increasing fiscal pressures, could all these programs be continued?
- how to maintain performance in case of substantial in-migration

Open Space

Most Relevant Goals

- improved air quality
- reduced carbon emissions
- self-sufficient with renewable energy
- protected habitat
- protect water from pollution
- reduce waste production
- healthy recreation, local food
- all services accessible, affordable
- strong identity, community pride
- reduced taxes, careful budgeting

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Existing Strategies

Prince George OCP

- Protect agricultural lands, environmentally sensitive areas, and key wildlife habitat,
- Avoid natural hazards including the floodplain and steep slopes
- Provide public access and viewpoints to rivers, smaller watercourses, lakes and wetlands
- Protect riparian areas, groundwater, and wildfire interface
- Provide parks and open spaces with different uses and sizes
- Create a complete network of trails

Wildfire Management Strategy

- Strategies: Safety, Protection, Preparedness, Prevention, Interagency Co-operation and Policy, Education
- Require "Firesmart" development at interface
- Prioritize fuel reduction to reduce wildfire risk

Community Forest Management Plan

- Manage for safety, fire hazard reduction, forest health and biodiversity.
- Meet both timber and non-timber values.
- Provide recreation trails and maintain visual quality
- Chip debris to minimize air quality impacts.
- Increase stand composition of deciduous trees

Parks & Open Space Master Plan

- Acquire parks to meet local needs, mitigate floods, and provide greenway links
- Prioritize district-scale parks
- Encourage design that is multi-use, multi-purpose and safe
- Sell parks that do not support community goals, use funds to support parks priorities

City of Prince George stream protection strategies

- Require developments within 50m of fish-bearing streams to leave buffers, minimize stormwater runoff and avoid contamination and erosion.
- Collaborate with senior government to ensure all regulations are addressed in development

Watershed drainage plans

- Manage stormwater to minimize pollution, erosion, and other disruptions to habitat

Flood Risk Evaluation and Control Options – Phase 1 report Plan

- Update floodplain mapping to include climate-related freeboard and upland influences
- Limit development in the floodplain

Food system workshop (Jan 2010)

- Consider encouraging backyard and local agriculture
- Consider non-timber forest products (food, others)

SGOG Downtown Prince George Concept Plan

- Connect to the river with a waterway and park
- Great public space with Farmer's market

Trails Master Plan

- Connect critical links with new trails
- City to lead trail development with citizen assistance

OBAC Agricultural Strategy

- Protect existing productive agricultural land better

Implications

Effectiveness:

- strategies are well-aligned with the community vision
- it is not clear if they contribute adequately to achieving the vision – e.g. agricultural land protection, carbon offsets, extension of habitat could improve performance.
- prioritization, emphasis on multi-purpose space, and revenue generation may be necessary to manage the civic budget

Future Risks:

- with increasing fiscal pressures, could the vision be attained, especially for facilities and recreation?
- how can equitable geographic distribution of amenities be ensured?
- are protected agricultural lands adequate?

Comments and additions: