



*Citizens for a*  
***Sustainable Cobourg***

Second submission  
Town of Cobourg Official Plan Review

February 3<sup>rd</sup>, 2009



# **Citizens for a Sustainable Cobourg**

## **Recommendations for Cobourg's Official Plan Review**

*Second submission by Citizens for a Sustainable Cobourg  
February 3<sup>rd</sup>, 2009*

### **Introduction**

This paper is a second submission from Citizens for a Sustainable Cobourg as part of the Town of Cobourg's Official Plan (OP) Review process. Citizens for a Sustainable Cobourg (CSC) is a community-based organization promoting sustainability in Cobourg (*see Appendix A for a full description of CSC*). This paper builds on CSC's first submission, *A New Urban Design Vision for Cobourg*, December 17, 2008.

This paper is a planning analysis of the current Cobourg Official Plan as well as a response to the *Background & Future Directions Report*, January 2009, a discussion paper issued by Cobourg as part of its Official Plan Review.

This submission seeks to translate the overall objective of sustainability into an urban planning framework for Cobourg, to be reflected in the revised Official Plan. In this paper, CSC makes specific recommendations for amendments and revisions to Cobourg's Official Plan. The recommendations proposed are CSC's attempt to express a sustainable approach to urban planning in Cobourg's Official Plan. The specific recommendations are listed in the final section of this paper.

### **What is "Sustainability"?**

CSC defines "sustainability" as a state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations. It can also be expressed in the simple terms of a golden rule for society: *leave the world better than you found it, take no more than you need, try not to harm life or the environment, make amends if you do.*

CSC believes the following challenges to achieving sustainability must be addressed:

- Climate change due to human-induced build-up of carbon dioxide (CO<sub>2</sub>) in the atmosphere
- Waste from discarded products and packaging creating a huge disposal challenge while squandering valuable resources
- Travel by car and airplane causing climate change, air and noise pollution, and congestion
- Destructive patterns of resource exploitation and use of non-local materials in construction and manufacturing increasing environmental harm and reducing gains to the local economy
- Industrial agriculture producing food of uncertain quality and harming local ecosystems, and the consumption of non-local food imposing high transport impacts
- Pollution and over-consumption of local supplies of freshwater, and disruption of hydrological cycles

- Loss of biodiversity and habitats due to development in natural areas and over-exploitation of natural resources
- Local cultural heritage lost throughout the world due to globalization, resulting in a loss of local identity and wisdom
- Poverty, even in the industrialized world, but especially in the developing world where people cannot meet their basic needs from what they produce or sell
- Increasing divergence between rising wealth and greater health and happiness, raising questions about the true basis of well-being and contentment

In response to these challenges, and drawing on the wider analytical work being done of society's ecological footprint<sup>1</sup> CSC recommends the following **Sustainability Objectives**:

- Sustainable carbon emissions
- Reduce and ultimately achieve Zero Waste Economy
- Promote access (to goods, services, employment, education, recreation, etc) while reducing vehicular traffic
- Use of local and renewable materials
- Local and sustainable food production
- Water source protection
- Natural habitats and wildlife protection
- Culture and heritage conservation
- Equity and fair trade
- Health and happiness

CSC has sought to meet these Sustainability Objectives in this paper and in its proposed approach to Cobourg's Official Plan.

### ***Connection between urban design and sustainability***

There are many significant changes needed to achieve sustainability, including new technologies, new industrial and agricultural processes, reduced consumption, a switch to renewable energy sources, better regulations, pricing pollution and external costs, increased efficiency, and a change in values, just to name a few. However, the way we design and live in our towns and cities is clearly one of the most significant changes needed to bring in a new era of sustainability.

Our urban design, in both land use and transportation, has an enormous affect on our consumption of land, energy, and other resources, and on our creation of pollution and greenhouse gases. Here are a few examples:

- Carbon dioxide emissions are four times greater when shopping in a suburban big box store than when shopping in a local supermarket<sup>2</sup>
- Automobile-oriented transportation increases transportation land requirements by 3 to 5 times<sup>3</sup>.

1 <http://www.footprintnetwork.org/en/index.php/GFN/> and

[http://www.bioregional.com/programme\\_projects/opl\\_prog/principles.htm](http://www.bioregional.com/programme_projects/opl_prog/principles.htm)

2 Setting Up Superstores and Climate Change, Jean-Marie Beauvais Consultants, December, 2008

3 Transportation Cost and Benefit Analysis, Techniques, Estimates and Implications [Second Edition], Victoria Transport Policy Institute, 2009, p. 5.14-4

- The average automobile creates damage from greenhouse gas emissions costing up to US \$0.15 per mile travelled<sup>4</sup>
- Residents of walkable communities typically walk 2-4 times as much as those in automobile dependent communities<sup>5</sup>
- Doubling the number of people/jobs per hectare can reduce miles travelled by up to 30%<sup>6</sup>

Given the urgency of the environmental crisis, this strong connection between urban design and sustainability must be recognized and addressed in the review of Cobourg's Official Plan.

### **'Places to Grow Plan' (PTG)**

The Province of Ontario has the responsibility for setting the urban planning policy framework for all municipalities in the Province. The way we have accommodated population growth since WW2, and the way we have planned and designed our communities and our transportation systems, have created serious negative impacts on the environment. These impacts include climate change, loss of farmland and natural habitat, pollution of water and air, and over-consumption of resources. Recognizing the seriousness of these negative impacts, the Province introduced a new planning policy framework for the Greater Golden Horseshoe (GGH) in June, 2006. This policy framework is called the Places to Grow (PTG) Plan.

The regular review of Cobourg's Official Plan was delayed to accommodate the introduction by the Province in June 2006 of its Places to Grow (PTG) Plan. In the PTG Plan the population and employment growth in the GGH will be accommodated by:

- Directing a significant portion of growth to the built-up areas of the community through intensification
- Focusing development in intensification areas<sup>7</sup>
- Building compact, transit-supportive communities
- Reducing dependence on the automobile through the development of mixed-use, transit-supportive, pedestrian-friendly urban environments
- Providing convenient access to intra- and inter-city transit
- Ensuring the availability of sufficient land for employment to accommodate forecasted growth to support the GGH's economic competitiveness
- Planning and investing for a balance of jobs and housing in communities to reduce the need for long distance commuting and to increase the modal share for transit, walking and cycling
- Developing complete communities with a diverse mix of land uses, a range and mix of employment and housing types, high quality public open space, and easy access to local stores and services
- Directing development to settlement areas<sup>8</sup>

4 Ibid, p. 5.10-24

5 Land Use Impacts on Transport, How Land Use Factors Affect Travel Behavior, Todd Littman, Victoria Transport Policy Institute, 2008, p. 42

6 Ibid.

7 Intensification areas are lands identified by municipalities or the Minister of Public Infrastructure Renewal within a settlement area that are to be the focus for accommodating intensification.

8 Settlement areas are urban areas and rural settlement areas within municipalities (such as cities, towns, villages and hamlets) where: a) development is concentrated and which have a mix of land uses; and b) lands have been designated in an official plan for development over the long term planning horizon provided for in the Provincial Policy Statement, 2005. Where there are no lands that have been designated over the long-term, the settlement area may be no larger than

The revised Cobourg Official Plan resulting from this Official Plan Review must conform to the requirements set out in the PTG Act of 2005<sup>9</sup>. These requirements will necessitate some significant revisions to the current OP, including:

- Developing and implementing a strategy and policies for intensification, including setting an intensification target
- Identifying intensification areas, intensification corridors, and major transit station areas
- Identifying the built boundary
- Modifying density targets, for intensification and to support a transit plan
- Developing and implementing a transit plan, making transit the first priority for infrastructure planning and investment
- Shifting travel from the automobile to transit, bicycling, and walking, and reducing trip distance and travel time
- Creating an affordable housing strategy and identifying affordable housing targets
- Planning for a range of housing types, including encouraging secondary suites
- Creating diverse and complete neighbourhoods
- Creating strategies to conserve water and energy, protect air quality, and better manage waste

The environmental trends that precipitated the Places to Grow Plan, trends such as climate change, wide scale pollution, loss of farmland and natural habitat, non-absorbable waste, and resource exhaustion, are all growing worse. The planning requirements set out in Places to Grow are only a first step in the necessary re-design of our towns and cities in order to achieve sustainability. As the current environmental crisis deepens it will become apparent, even to reluctant public decision makers, that further and more fundamental change is required.

### ***New Urban Design Principles***

Cobourg's recently issued public discussion paper, *Background & Future Directions Report*, proposes new *Urban Design Principles* to be included in the Official Plan. These principles would guide future planning and development in Cobourg. The proposed new Urban Design Principles include:

1. Protect historical, natural and rural heritage
2. Encourage compact, mixed use development
3. Promote sustainable development
4. Provide a variety of housing
5. Provide a vital setting for employment

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the area where development is concentrated.

9 SO 2005, Chapter 13 – Places to Grow Act – articles 12 & 13

We support these new Urban Design Principles. We also believe there are a number of additional Urban Design Principles to be added. These include:

**6. Create and celebrate public spaces**

Public spaces such as streets, parks, lanes, trails, walkways, squares, and beaches are all a vital part of civil society and essential for supporting and enjoying community life and nature. These public spaces need to be protected, expanded, connected, enhanced, and well-designed.

**7. Create beautiful and vibrant public streets**

Public streets are social gathering places providing opportunities for people to meet as well as being avenues of travel. It is important that public streets be safe and enjoyable for pedestrians and cyclists as well as accommodating traffic for motorized vehicles.

**8. Promote access while reducing traffic volumes**

Mobility is not demanded for its own sake, but for the access it provides to goods, services, employment, education, recreation and other amenities. Through better land use planning, well designed street configurations, and multiple modes of transportation, access can be improved while at the same time reducing the negative environmental effects of excessive traffic volumes.

**9. Promote healthy lifestyles and physical, mental, and spiritual well-being**

The design as well as the physical and financial accessibility of publicly funded community facilities and spaces is important for promoting community, health, and well-being. The availability of affordable housing is also vital to health, employment, and well-being.

## ***What Official Plan Changes Are Needed to Create Sustainability?***

### **Develop an Intensification Strategy**

The work of the OP Review will need to include the development of a strategy for intensification, including setting an intensification target(s), identifying intensification areas, intensification corridors, and major transit station areas<sup>10</sup>.

The benefits of intensification include:

- Protection of farmland by reducing the size of Cobourg's development footprint
- Reduction in municipal infrastructure costs and municipal operating costs
- Increased efficiency in energy and material use
- A more compact urban form to support transit, cycling, and walking
- Reduced trip length, saving time and energy, and reducing pollution and GHG emissions
- An opportunity to improve urban design and amenity, such as creating pedestrian friendly streetscapes
- Supports "active communities", promoting health and fitness.

Intensification can be accomplished in several ways, including:

- Developing currently undeveloped parcels within the built-up area
- Re-developing greyfield and brownfield sites
- Re-developing shopping malls, strip malls, and parking lots

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<sup>10</sup> see the Places to Grow Plan for an explanation of these terms—<http://placestogrow.ca/images/pdfs/FPLAN-ENG-WEB-ALL.pdf>

- Revising zoning requirements to allow narrower lot widths and reduced setback requirements
- Infill developments on under-utilized parcels.
- Expansion or conversion of existing buildings
- Creating secondary suites

## **Develop Neighbourhood Plans for Compact Urban Form**

One of the key concepts included in the Places to Grow plan is the idea of “compact urban form”. This is defined as:

“A land-use pattern that encourages efficient use of land, walkable neighbourhoods, mixed land uses (*residential, retail, workplace and institutional all within one neighbourhood* [emphasis added]), proximity to transit and reduced need for infrastructure. Compact urban form can include detached and semi-detached houses on small lots as well as townhouses and walk-up apartments, multi-storey commercial developments, and apartments or offices above retail.”<sup>11</sup>

Few of Cobourg’s existing neighbourhoods reflect this land-use pattern. The work of the OP Review must include modifying existing neighbourhood plans, zoning, and guidelines to promote their transformation into a compact urban form. The work includes:

- identifying and creating clustered destinations within neighbourhoods to shorten trip lengths and encourage walking, cycling, and transit (e.g. neighbourhood commercial areas)
- identifying and (re)zoning land within each neighbourhood for meeting people’s daily living needs (e.g. food stores)
- creating and improving pedestrian and cycling access and adding to walking and cycling routes
- intensification of land uses to support transit and use land efficiently
- zoning, setback, and parking requirements to promote street-oriented retail, commercial, and institutional uses
- appropriate urban design guidelines
- financial and tax incentives to support and encourage this transformation

## **Develop a Transportation Strategy**

The work of the OP Review will also need to include the development of a transportation strategy for shifting the movement of people from automobile use to public transit, bicycling, and walking. Elements of this strategy will include:

- creating a network of bike lanes
- adding sidewalks where missing, and widening sidewalks where appropriate
- making major streets more bicycle and pedestrian friendly by adding bike lanes and sidewalks, reducing the number and width of motorized vehicle lanes, and using traffic calming measures
- re-designing existing neighbourhoods to significantly improve street connectivity, increase pedestrian access, and add to walking and cycling routes

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<sup>11</sup> Places to Grow Plan, p. 41

- improving and renewing existing neighbourhoods to add diversity and mix to neighbourhood land uses and to reduce trip length for regular activities
- adding and improving transit services

The OP should be amended to include as part of the Transportation Strategy a plan to develop a complete Bicycle Action Plan to be implemented within a specific timeframe. An example of such a plan is the one developed by Toronto called "Shifting Gears"<sup>12</sup>.

This plan can include many elements to promote biking in addition to a complete bike network, such as bike courses, special bike days or weeks, kids bike camps, bike parking, etc.<sup>13</sup>

Cobourg's bike strategy should also include the creation of a Cycling and Walking Advisory Committee as a committee of Council to promote walking and cycling.

As we make the transition to sustainability, public transit will become increasingly important in Cobourg. A *Transit Advisory Committee* would also help Council identify the transit strategies and investments that would work best for Cobourg.

Another concept which should be included in Cobourg's Transportation Strategy is the idea of "active communities". The Haliburton, Kawartha, Pine Ridge District Health Unit has been actively supporting this idea of promoting health through designing for active communities<sup>14</sup>. One of the excellent presentations on this group's website is by Cobourg planner Rob Franklin.

Additional attention should be given in the revised OP to making transit connections with other nearby municipalities, e.g. Port Hope, Grafton, Colborne, Brighton, Warkworth, Campbellford, and Trenton.

## **Develop a Greenlands Strategy**

The work of the OP Review should include the development of a strategy to implement the excellent framework set out in the existing OP.

CSC also supports the proposal in the *Background & Future Directions Report* to provide for the development of additional small, passive parkettes to front on public streets for easy accessibility.

This Greenlands Strategy should also include an ambitious program for planting trees, perhaps as many as 40,000 additional trees (2 trees per person) over the next 5 years.

## **Develop a Climate Change, Conservation, and Renewable Energy Strategy**

The reduction of GHG emissions, conservation of energy and water, and the development of renewable energies should be included as a new section of the Official Plan with a detailed and comprehensive **Environmental Strategic Plan**.

Because the Town still owns its own energy utility, it has substantial organizational capacity to pursue an aggressive energy conservation and renewable energy strategy. While senior levels of government have still not provided sufficient resources and program incentives to meet the challenge, this is changing and must change further if we are to meet the GHG emission reduction targets identified by the International Panel on Climate Change (IPCC). The IPCC is calling for an 80% global reduction in GHG from 1990 levels by 2050. Canada's share in this reduction would need to be proportionally greater given that it is one of the worst emitters. Consequently, Canada needs to reduce GHG emissions by over 85% from current levels.

12 [http://www.toronto.ca/cycling/bikeplan/pdf/bike\\_plan\\_brochure.pdf](http://www.toronto.ca/cycling/bikeplan/pdf/bike_plan_brochure.pdf);  
[http://www.toronto.ca/cycling/bikeplan/pdf/bike\\_plan\\_full.pdf](http://www.toronto.ca/cycling/bikeplan/pdf/bike_plan_full.pdf); and <http://www.toronto.ca/cycling/bikeplan/pdf/newsletter-summer2007.pdf>

13 <http://www.toronto.ca/cycling/index.htm>

14 <http://www.hkpr.on.ca/healthy-lifestyles-master.asp?id=2702>

Many elements could be included in a GHG emissions reduction, energy conservation, and renewable energy strategy such as:

- Energy retrofit all Town owned or controlled buildings and facilities to reduce the GHG emissions of these buildings and facilities by at least 60%. There are government programs to support this, including loans from the Province's Ontario Strategic Infrastructure Financing Authority (OSIFA).
- Offer loans to Cobourg building owners to retrofit their energy buildings and have these loans repaid through a surcharge on their property taxes. Cobourg could approach OSIFA to borrow these funds. They would be repaid through the municipal tax surcharges.
- Replace all municipally owned and controlled vehicles with more fuel efficient vehicles. The fuel savings will largely pay for this.
- "Reduce the juice" – meaning, introduce a Town policy that staff turn off all unnecessary lights when not in use, and turn off all computers, monitors and printers when leaving the office for the day.
- Follow the Town of Caledon's lead to switch entirely to the use of electricity from renewable resources (such as Bullfrog Power). There is an additional cost to such an approach (currently the rates are approximately 9 cents per kilowatt hour as compared to the current hydro electric rates of 5.5 cents per kilowatt hour) but, this would be another action that would demonstrate environmental leadership to the community in a visible way and a commitment to positive environmental action.
- Install geothermal, solar thermal, and/or solar photovoltaic panels in town buildings and facilities to partially meet energy demand, and use solar parking lot lighting at town facilities.
- Have Lakefront Utilities develop a "solar utility" similar to the idea the Toronto is considering<sup>15</sup>.
- Develop a number of utility-sized wind turbines in or near Cobourg. Lakefront Utilities could help take the lead for this in the same way that Toronto Hydro did for the wind turbine at the Canadian National Exhibition grounds. This would supply power to the town as well as be a tourist attraction.
- Reduce the number of fossil fuel powered machines used by the Town. For example, explore the planting of boulevards and town-owned lands with low-maintenance native ground covers, or wildflowers instead of grass; stop the use of leaf blowers; reduce the number of times that grass is cut in the parks, etc.
- Require low-flow shower heads and low-flow toilets on every home. Offer tax rebates for replacement. This will reduce the amount of water and sewage needing to be pumped and treated by the Town.
- Fully subsidize the cost of composters and/or rain barrels.
- Set the pricing of electricity and water use by Lakefront Utilities to encourage energy conservation, such as using a stepped pricing schedule.
- Introduce motion sensors for light switches on all appropriate rooms in Town owned buildings and facilities, such as washroom and change room lights.
- Replace all incandescent lights with compact fluorescent or equally efficient lighting in Town owned or controlled buildings and facilities.

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15 <http://www.toronto.ca/legdocs/mmis/2007/gm/bgrd/backgroundfile-7973.pdf>

- Revise procurement policies to encourage purchases from suppliers who have implemented GHG reduction plans<sup>16</sup>.
- Hold several public meetings and invite the public to submit suggestions to the Town on how it could reduce GHG emissions.
- Construct any new civic buildings in accordance with LEED Gold standard.
- Manage the Town's vehicle fleet by implementing driver awareness, right-sizing, and anti-idling activities. This can reduce fleet vehicle fuel consumption by about 10% without any significant costs.
- Make use of the Green Municipal Fund<sup>17</sup>.

## Develop a Sustainable Employment Strategy

Environmental sustainability, the reduction of greenhouse gases, and the promotion of conservation, and renewable energy strategy can be the core of a robust employment strategy (see Appendix C for the example of Dardesheim, Germany). The conservation and renewable energy strategy described above has the potential to create hundreds of jobs and attract employers into this region.

The idea of *re-localization* also has the potential to strengthen Cobourg's economy (see Boulder County's and Bellingham, Washington's strategies to re-localize<sup>18</sup>).

Re-localization of the economy involves transforming the process and materials used in industrial production. Northumberland County could be a leader in this transformation. Building a local food production, processing, and distribution system is one obvious example of how a re-localized economy could be built.

Cobourg households spend an estimated \$54 million per year on food based on Statistics Canada per household expenditure on food. Cobourg businesses and households together spend an additional \$60 million per year on fuel and electricity<sup>19</sup>. Most of this \$114 million leaves the community, representing a direct drain on the incomes of Cobourg households and businesses. Investments in improving energy efficiency and in local food and energy production and processing stimulate the local economy and create local employment, and indirect impacts multiply these benefits to the local economy.

There are other examples. The production of plastics, of which Northumberland County has a number of plants, is one. There is a growing move toward "green chemistry"<sup>20</sup>, including in the production of plastics. The presence of six times more plastic than zooplankton in areas of the Pacific Ocean is just one crisis that is fuelling the awareness of the need for this transformation.

The University of Ontario Institute of Technology (UOIT) is obliged to work with Northumberland County to support local research on the technological and industrial process. Cobourg, Northumberland County, its plastics industry, and UOIT could work together to make the County a centre for sustainable plastics production. Other industries in the County could seek similar sustainability strategies. These strategies could attract additional high quality jobs to Cobourg and the County.

16 See, for example - <http://www.ci.san-leandro.ca.us/refuse/EPPPpolicy.pdf>

17 <http://sustainablecommunities.fcm.ca/home/>

18 <http://www.bouldercountygoinglocal.com/> and <http://sconnect.org/thinklocal/>

19 Climate Action Plan, Town of Cobourg, Phase I -- Greenhouse Gas Inventory, July 2008

20 <http://www.mcgill.ca/reporter/39/07/chemistry/>

## Develop an Affordable Housing Strategy

Affordable housing development is primarily the responsibility of Northumberland County and the senior levels of government. However, this does not mean that Cobourg cannot play an active role in facilitating the supply of affordable housing<sup>21</sup>. Some possibilities include:

- Cobourg offering and securing land for affordable housing development
- Reducing municipal charges for affordable housing
- Creating an **Affordable Housing Advisory Committee** to advise Council on policies to promote affordable housing.

## Secondary plans

In taking a sustainable approach to Cobourg's Official Plan, some of the Secondary Plans would need to be reviewed and revised. This section offers an analysis and discussion of the Elgin-Densmore Second Plan, the Cobourg East Community Second Plan, and the Cobourg West Business Park Secondary Plan.

### Elgin-Densmore Secondary Plan

The Elgin-Densmore community is in the process of being built out. The design of this community is inconsistent with the approach described in the PTG Plan and with sustainable planning. The urban design of Elgin-Densmore does not support transit and discourages walking and cycling. This secondary plan should be reviewed and revised.

#### *Transit in Elgin-Densmore*

The Elgin-Densmore community (Division/Elgin/401/east boundary) is estimated to be approximately 168 hectares. With a planned population of 3700, the density would be approximately 22 people per hectare, or approximately 9 units per hectare. According to the Province's *Transit-Supportive Land Use Planning Guidelines*<sup>22</sup>, the following transit service minimum residential densities are required to support transit:

Bus, 1 km route spacing with 1 hr. service requires 4 units/acre (10 units/hectare) adjacent to route

Bus, 1 km route spacing with 1/2 hr. service requires 7 units/acre (17 units/hectare) adjacent to route

Bus, 1 km route spacing with frequent service requires 15 units/acre (37 units/hectare) adjacent to route

Rapid Transit, 5 min. headways during peak hours requires 12 units/acre (30 units/hectare) average density over extensive areas with higher densities in central areas and around stations.

This suggests that at build-out the Elgin-Densmore community could almost support transit at 1 hr. intervals, which is not very convenient. This would occur if the maximum density allowed in the Elgin-Densmore community is actually built (i.e. 3700 people according to the Elgin-Densmore Secondary Plan). However, land in this community is not being developed at the maximum density. Land zoned for higher density is often built at low densities. If the Elgin-Densmore community is developed with a lower built-out population, for example 2500 people (6 units/hectare), it will not support transit at even a 1 hour interval.

21 <http://www.mah.gov.on.ca/Page143.aspx>

22 <http://www.mah.gov.on.ca/AssetFactory.aspx?did=1179>

This problem of low-density development on land designated for medium and high density development is also a problem elsewhere in Cobourg. *Cobourg should address this problem in the Official Plan by setting minimum density requirements for lands designated for medium and high density development.*

#### *Walking and Cycling in Elgin-Densmore*

The design of a neighbourhood is very important for encouraging people to walk and bike to meet their daily needs. Important in this regard is the “connectivity” of a neighbourhood, i.e. how many fairly direct walking and biking routes are there to get to nearby destinations or to other parts of the neighbourhood.

The Elgin-Densmore community has low connectivity. Most destinations to meet daily needs (shopping, restaurants, appointments, etc.) are along Division St. or Elgin St. There are 3 connection points to these streets: Densmore Rd. and a pedestrian path off of Otto Drive connect to Division St., and Birchwood Trail connects to Elgin St. However, even to get to these few connection points, the street configurations are not laid out to take you directly there.

The urban design in the Elgin-Densmore Secondary Plan needs to be reviewed and revised to meet the new Urban Design Principles discussed above. Because there are significant sections of Elgin-Densmore remaining to be developed, Cobourg should not miss the opportunity to reflect these Urban Design Principles in the remaining build-out of the Elgin-Densmore community.

### **Cobourg East Community Secondary Plan**

Cobourg East Community Secondary Plan (CECSP) area, formerly called development area C, consists of 571 hectares north and east of the built-up area of Cobourg. The CECSP (OP Amendment No. 61) was introduced in May, 2005. Much of the Cobourg East area was recently added to Cobourg’s settlement area (i.e. slated for greenfield development) based on the assumption that growth in Cobourg would continue to be generally very low density and that only a small amount of the future growth in Cobourg would be accommodated through intensification.

With the introduction of the Places to Grow Plan a different approach is now required. The PTG Plan contemplates a significant portion of future growth being accommodated within the built-up area, outside of the CECSP. The OP Review must re-consider the need for developing land in the Cobourg East Community Secondary Plan and the timing for any such development. Cobourg’s existing built-up area is a far better place to focus its growth than to develop land in the CECSP, much of which is existing farmland. This additional density within the built-up area is required to support public transit and would improve the use of existing infrastructure while strengthening the municipal finances of the Town.

It is clear from the analysis in the *Background & Future Directions Report* that all future development to 2031 can be accommodated within: 1) the built up boundary, including the remaining areas to be developed in Elgin-Densmore community (particularly if minimum density limits are set), and 2) within the remaining areas to be developed within the New Amherst Community Secondary Plan. Consequently, *a moratorium until 2031 should be placed on any development on greenfield lands except for lands in the New Amherst Community Secondary Plan.* Other than a portion within the built-up boundary west of Brook Rd., this would include all lands within the Cobourg East Community Secondary Plan. The agriculture lands in the CECSP area should be farmed during the moratorium.

### **Cobourg West Business Park Secondary Plan**

Of the elements of the current OP that conflict with the vision and the requirements of the Places to Grow Plan, the Cobourg West Business Park Secondary Plan (CWBSP) is one of the more significant. This area is essentially a “power centre” for big-box stores. It currently includes a

large Home Depot and Wal-Mart, and has approved the development of a Loblaws Superstore. Wal-Mart has recently made an application to substantially expand its operation, including the development of a large grocery store. *All of this conflicts with the intention and provisions of the Places to Grow Plan.*

The Places to Grow Plan requires that urban development be in compact urban form with “residential, retail, workplace and institutional all within one neighbourhood”. This urban design intends to reduce trip length and encourage people to switch from automobile travel to transit, bicycling, and walking by creating neighbourhoods offering the services to meet everyday needs within walking distance of their home, *all within their neighbourhood*. The CWBPSP has exactly the opposite effect.

The CWBPSP encourages commercial and retail development which serves a large regional market, not a neighbourhood market. This area is a vast expanse of parking for a reason. The Home Depot, for example, covers a market of 80,000 people, approximately the size of Northumberland County. Such development draws customers away from local, neighbourhood-based markets. Trip lengths increase and shopping is increasingly done by the automobile, driving long distances.

Cobourg Council and planning staff may have felt in the past that it had no choice but to accommodate big-box store development. The thinking may have been that if Cobourg doesn’t do so, some other town will. This problem must be addressed by a regional planning strategy co-ordinated by Northumberland County based on the PTG Plan. However, there is a great deal that Cobourg itself can do to address this problem.

The economic arguments for big-box stores do not recognize the public and environmental costs of this type of development. Research<sup>23</sup> has shown that while consumer prices at these very large retail outlets can be reduced, these savings are shifted as costs onto the public for additional roads and infrastructure, onto consumers for additional transportation costs, onto smaller urban communities who lose local retail choice as well as local property tax assessment, and onto the environment from fossil fuel consumption for additional car travel to bring people to goods rather than goods to people.

### ***District Commercial, Neighbourhood Commercial, Shopping Node, and Special Shopping Node Areas***

The PTG Plan requires that neighbourhoods be designed with a mix of diverse uses. One objective of doing so is to ensure that each neighbourhood can meet people’s everyday needs within walking distance of their home, *all within their neighbourhood*. Because there is only a limited market for any particular retail and other commercial space, it is important that commercial buildings be sized to reflect the size of the market they are intended to meet. In particular, retail buildings focused on a neighbourhood market should reflect this size. Commercial buildings should also be placed in an accessible location within the neighbourhood they are serving.

The current OP provisions for commercial space do not reflect the design contemplated in the PTG Plan nor do they reflect a sustainable approach to land use planning. The current OP provisions and their implementation have supported and encourage the centralization of commercial space in larger and larger buildings located primarily in the northwest corner of Cobourg, isolated from most existing neighbourhoods and contributing to significantly longer trip length and use of motorized vehicles for access to these services. Consequently, the OP Review should include a review of OP provisions for commercial land uses.

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23 <http://www.bigboxswindle.com/> and <http://newrules.org/retail/>

The objective of the review should be to meet the Sustainability Objectives, and to meet the requirements of the PTG Plan, namely to:

- Shorten trip lengths
- Encourage walking, cycling, and transit
- Create mixed land uses within each neighbourhood, offering easy access to local stores
- Create pedestrian-friendly streets

We would argue that, based on both the requirements of the PTG Plan and the Sustainability Objectives described above, the Shopping Node Area and Special Shopping Node Area designations in the Official Plan are no longer appropriate and should be eliminated.

We also believe that the District Commercial and other commercial designations in the Official Plan should be reviewed and reconsidered based on both the requirements of the PTG Plan and the Sustainability Objectives described above. This review should consider at least the following:

- The appropriate location of commercial areas within neighbourhoods to offer the services to meet people's everyday needs within walking distance of their home
- The mix of uses which should be allowed in these neighbourhood commercial areas
- The size limits which should be placed on commercial buildings, particularly retail buildings, to reflect a neighbourhood-based market
- The financial incentives required to support businesses in neighbourhood-based commercial areas, and how these incentives can be provided
- The parking requirements for neighbourhood commercial areas to reflect the increased travel by walking, cycling, and transit.
- The design of neighbourhood commercial areas to create street oriented, pedestrian friendly environments.

## ***Municipal Finances***

The PTG plan states, "The policy directions for intensification and compact urban form in this Plan guide many of the infrastructure priorities in this section. It is estimated that over 20 per cent of infrastructure capital costs could be saved by moving from lower density development to more efficient and compact urban form. The savings could then be reinvested more efficiently."

### ***Kerr St.***

Another major infrastructure investment which should be considered in the OP Review in the context of intensification and more efficient use of infrastructure is the contemplated development of the Kerr St. road allowance. The current OP includes the policy of developing Kerr St. as a new east-west arterial road for almost the full width of Cobourg. Engineering drawings have been prepared for two new sections of this road<sup>24</sup>. Two sections of this road are already in place and another is under construction. The proposed alignment of this road as it approaches Brook Rd. North has been shifted north to accommodate a future grade separation at the rail crossing.

The further development of Kerr St. is a major infrastructure cost which should be reviewed and considered within the context of a complete Infrastructure Strategy which reflects the new OP as it is revised.

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24 <http://www.cobourg.ca/home.asp?PageID=389&smenuID=397>

## ***Setting Targets***

All of the strategies described above should have performance targets attached to them as appropriate in order to monitor success. These performance targets should be incorporated into the OP, with requirements for regular public reporting on their achievement.

## ***Including an Environmental Strategic Plan in the Official Plan***

The *Background & Future Directions Report* recommended that consideration be “given to directing in the Official Plan the establishment of an Environmental Strategic Plan or Integrated Community Sustainability Plan which would establish a long-term plan to realize sustainability objectives including environmental, culture, social and economic objectives.” (p.26)

We applaud the suggestion of developing an Environmental Strategic Plan. We would recommend that this plan be included as a section of the Official Plan, and that sustainability be considered and reflected throughout the Official Plan. We recommend that the Environmental Strategic Plan include the above mentioned Sustainability Objectives, as well as the following Specific Objectives and Strategies.

*[see next page]*

<b>SPECIFIC OBJECTIVES</b>	<b>STRATEGIES</b>
By 2020 reduce CO2 emissions from Cobourg by 30% below 1990 levels	Implement energy efficiency in buildings and infrastructure; supply energy from on-site renewable sources, topped up by new off-site renewable supply where necessary.
Reduce waste and ultimately achieve Zero Waste Economy	Reduce waste generation through improved design; encourage re-use, recycling and composting; generate energy from waste cleanly; eliminate the concept of waste as part of a resource-efficient society.
Reduce reliance on private vehicles and achieve major reductions of CO2 emissions from transport	Provide transport systems and infrastructure that reduce dependence on fossil fuel use, e.g. by cars. Offset carbon emissions from car travel.
Transform materials supply to the point where it has a net positive impact on the environment and local economy	Where possible, use local, reclaimed, renewable, and recycled materials in construction and products, which minimizes transport emissions, spurs investment in local natural resources and boosts the local economy.
Transform food supply to the point where it has a net positive impact on the environment, local economy, and people's well-being	Support local and low impact food production that provides healthy, quality food, while boosting the local economy in an environmentally beneficial manner; showcase examples of low-impact packaging, processing, and disposal; highlight benefits of a low-impact diet.
Achieve a positive impact on local water resources and supply	Implement water use efficiency measures, re-use, and recycling; minimize water extraction and pollution; foster sustainable water and sewage management; restore natural water cycles.
Regenerate degraded environments and halt biodiversity loss	Protect or regenerate existing natural environments and the habitats they provide to fauna and flora; create new habitats.
Protect and build on local cultural heritage and diversity	Celebrate and revive cultural heritage and the sense of local and regional identity; choose structures and systems that build on this heritage; foster a new culture of sustainability.
Ensure that the Cobourg community has a positive impact on surrounding communities	Promote equity and fair trading relationships to ensure the Cobourg community has a beneficial impact on other communities both locally and globally, notably disadvantaged communities.
Increase health and quality of life of Cobourg residents and others	Promote healthy lifestyles and physical, mental, and spiritual well-being through well-designed structures and community engagement measures, as well as by delivering on social and environmental targets.

## ***Specific Recommendations***

1. Include in the Official Plan the following **Sustainability Objectives**:
  - i. Sustainable carbon emissions
  - ii. Reduce and ultimately achieve Zero Waste Economy
  - iii. Promote access (to goods, services, employment, education, recreation, etc) while reducing vehicular traffic
  - iv. Use of local and sustainable materials
  - v. Local and sustainable food production
  - vi. Water source protection
  - vii. Natural habitats and wildlife protection
  - viii. Culture and heritage conservation
  - ix. Equity and fair trade
  - x. Health and happiness
2. CSC supports the five (5) Urban Design Principles proposed in the Background & Future Directions Report (pp. 24-25). In addition to these principles we recommend adding the following Urban Design Principles to the Official Plan:
  - **Create and Celebrate Public Spaces**

The Town will actively expand public spaces and improve street connectivity by introducing new public streets, lanes, walkways, trails, parks, and public squares. Blocks will be shortened and generally designed with a grid pattern, allowing easier and more direct travel to designations. All buildings will be integrated into public spaces by facing building entrances onto public streets. Parking lots along public streets will be discouraged. Parks and public squares will be edged by public streets allowing easy pedestrian access.
  - **Create Beautiful and Vibrant Public Streets**

The Town will work actively to design beautiful, safe, and enjoyable public streets, which accommodate the needs of pedestrians, cyclists, as well as motorized vehicles. The Town will encourage and strengthen the amenity and enjoyment of public streets by:
    - i. Adding and widening sidewalks
    - ii. Narrowing and reducing road lanes for motorized vehicles
    - iii. Using traffic calming measures
    - iv. Adding bicycle lanes on major streets and bicycle routes on other streets
    - v. Providing space for and planting additional trees
    - vi. Ensuring that buildings edge and face onto public streets
    - vii. Creating attractive streetscapes through appropriate building setbacks, height, and massing.
- **Promote Access While Reducing Traffic Volumes**

The Town will promote access while reducing traffic volumes by:

  - i. Promoting multi-modal transportation

- ii. Providing street configurations, densities, mixed uses, and an urban form that supports walking, cycling, and the early integration and sustained viability of transit services
  - iii. Clustering neighbourhood travel destinations
  - iv. Improving the conditions for non-motorized travel
  - v. Improving transit service
  - vi. Improving street connectivity
  - vii. Improving transit links to interregional bus and rail services
- **Promote healthy lifestyles and physical, mental, and spiritual well-being**  
The Town will promote the health and well-being of its residents and workers by:
    - i. Designing Cobourg to promote physical activity
    - ii. Offering publicly funded community facilities which are physically and financially accessible
    - iii. Ensuring that public buildings and public spaces are accessible for those with physical disabilities
    - iv. Promoting and supporting public events and activities for public enjoyment, education, and strengthening community
    - v. Promoting the availability of affordable housing
3. Add **Neighbourhood Plans** into the revised Official Plan. These Neighbourhood Plans should include the following:
- i. Identifying and creating clustered destinations within neighbourhoods to shorten trip lengths and encourage walking, cycling, and transit (e.g. neighbourhood commercial areas)
  - ii. Identifying lands within each neighbourhood for meeting people's daily living needs (e.g. food stores)
  - iii. Creating and improving pedestrian and cycling access and adding to walking and cycling routes
  - iv. Intensification of land uses to support transit and use land efficiently
  - v. Zoning, setback, and parking requirements to promote street-oriented retail, commercial, and institutional uses
  - vi. Appropriate urban design guidelines
  - vii. Financial and tax incentives to support and encourage neighbourhood commercial areas
4. **Review and revise the Transportation Strategy** in the Official Plan to include:
- i. Creating a Transportation Advisory Committee to identify the transit strategies and investments that would work best for Cobourg
  - ii. Creating a network of bike lanes
  - iii. Adding sidewalks where missing, and widening sidewalks where appropriate
  - iv. Making major streets more bicycle and pedestrian friendly by adding bike lanes and sidewalks, reducing the number and width of motorized vehicle lanes, and using

- traffic calming measures
  - v. Re-designing existing neighbourhoods to significantly improve street connectivity, increase pedestrian access, and add to walking and cycling routes
  - vi. Re-designing existing neighbourhoods to add diversity and mix to neighbourhood land uses and to reduce trip length for regular activities
  - vii. Adding and improving transit services
  - viii. Improving transit connections to regional and inter-regional bus and rail services
5. **Create a Cycling and Walking Advisory Committee** as a committee of Council to promote walking and cycling.
  6. **Include in the Official Plan the goal of planting of 40,000 additional trees** (2 trees per person) in parks and along public streets within Cobourg over the next 5 years.
  7. **Designate in the Official Plan a network of Biking/Walking Trails** throughout Cobourg (see recommendation from CSC Bicycle Action Committee)
  8. **Develop and include an Affordable Housing Strategy** as part of the Official Plan. Include the following in this strategy:
    - i. Cobourg offering and securing land for affordable housing development
    - ii. Reducing municipal charges for affordable housing
    - iii. Creating an Affordable Housing Advisory Committee to advise Council on policies to promote affordable housing.
  9. Include in the Official Plan a **moratorium until 2031 on any development on greenfield lands** except for lands in the New Amherst Community Secondary Plan. This would include all lands within the Cobourg East Community Secondary Plan, except for a part within the built-up boundary west of Brook Rd. North.
  10. **Review and revise the Elgin-Densmore Secondary Plan** to reflect the proposed Urban Design Principles.
  11. **Review and revise the Cobourg West Business Park Secondary Plan** to reflect the proposed Urban Design Principles.
  12. **Set minimum densities** for land identified for medium and high density residential and mixed uses.
  13. **Include in the OP Review a review of OP provisions for commercial areas.** The objective of this review should be to meet the requirements of the PTG Plan, and to meet the proposed Sustainability Objectives, namely to:
    - i. Shorten trip lengths
    - ii. Encourage walking, cycling, and transit
    - iii. Create mixed land uses within each neighbourhood, offering easy access to local stores
    - iv. Create pedestrian-friendly streets

This review of OP provisions for commercial areas should include a review of District Commercial and other commercial designations in the Official Plan. These areas should be reviewed and reconsidered based on both the requirements of the PTG Plan and the Sustainability Objectives described above. This review should consider at least the following:

- i. The appropriate location of commercial areas within neighbourhoods to offer the services to meet people's everyday needs within walking distance of their home
  - ii. The mix of uses which should be allowed in these neighbourhood commercial areas
  - iii. The size limits which should be placed on commercial buildings, particularly retail buildings, to reflect a neighbourhood-based planning approach
  - iv. The financial incentives required to support businesses in neighbourhood-based commercial areas, and how these incentives can be provided
  - v. The parking requirements for neighbourhood commercial areas to reflect the increased travel by walking, cycling, and transit.
  - vi. The design of neighbourhood commercial areas to create street oriented, pedestrian friendly environments.
14. **Eliminate the land use designations in the Official Plan for "Shopping Node Area" and "Special Shopping Node Area"**. Identify existing buildings in these existing designations as legal non-conforming uses.
  15. **Designate the area within 500 metres of the train station as a Major Transit Station Area**. This area should be planned with medium and high density mixed uses including residential, institutional, commercial, and office uses.
  16. **Review and consider the further development of Kerr St.** within the context of a complete Infrastructure Strategy which reflects proposed new Urban Design Principles and the new OP as it is revised.
  17. **Identify the following Unique Sites** in the Official Plan:
    - i. Lands adjacent to Division St. immediately south of the railway (including Mid-Town Mall and other smaller nearby malls)
    - ii. Northumberland Mall and lands adjacent to Elgin St. from William St. to Rogers Rd.
    - iii. Tannery Site and adjacent lands
    - iv. Lands within 500 metres of the railway station, i.e. lands within a to-be-designated Major Transit Station Area.
  18. **Develop specific planning requirements and design guidelines** for the redevelopment of these Unique Sites.
  19. **Identify neighbourhood areas which do not have a convenience store** within 250 metres walking distance. In such areas, identify one or more suitable sites for a convenience store.
  20. **Reduce the minimum lot frontage for a single detached dwelling** to 30 feet, for a semi-detached dwelling to 25 feet, and for townhouses to 20 feet.
  21. **Include targets** in the Official Plan for:
    - i. Reduction of CO<sub>2</sub> emissions in Cobourg
    - ii. Affordable housing
    - iii. Additional trees planted

- iv. Percentage of trips taken by walking, biking, or transit
- v. Density targets by Neighbourhood Planning Area
- vi. Number of transit riders
- vii. Number of new jobs created
- viii. Length of Bicycle/Walking Trails
- ix. Percentage of bike lanes completed on Major Streets
- x. Percentage of bike routes created on other streets
- xi. Volume of municipally treated water provided
- xii. Volume of municipally treated sewage
- xiii. Percentage of municipal buildings energy retrofitted
- xiv. Percentage of commercial, institutional, and industrial buildings energy retrofitted
- xv. Percentage of residential buildings energy retrofitted
- xvi. Percentage of Cobourg's electricity supply met from renewable sources
- xvii. Percentage of food consumed from local sources

All of the above targets should be reported regularly.

- 22. **Develop an Environmental Strategic Plan** as a section of the Official Plan. Include comprehensive Sustainability Objectives, Specific Objectives, and Strategies in the Environmental Strategic Plan (*see Appendix B*).
- 23. Include in the Environmental Strategic Plan the **introduction of an additional property tax on commercial, retail, office, and industrial parking lots** to reflect the externality costs of automobile commuting. Parking for neighbourhood-based commercial areas should be exempted from this tax. The revenue raised from this tax should be used to fund projects to achieve the Specific Objectives and Strategies in the Environmental Strategic Plan.

## ***Final Words***

Cobourg's Official Plan should be regarded as a blueprint for change—our flight plan into the future. We need to take on our larger responsibility as citizens of the global community and make truly sustainable development decisions. We need to embrace change.

In our view, the neighbourhood should be the basic unit of development and redevelopment. Neighbourhoods form identifiable areas that encourage citizens to take ownership of their maintenance and evolution. They provide a coherent physical framework to support economic vitality, community stability, and environmental and human health.

Our suggestions for changes to the Official Plan advocate the restructuring of public policy and development practices to support the following principles: neighbourhoods should be diverse in use and population; our community should be designed to be pedestrian and transit friendly; Cobourg's built area should be shaped by physically defined and universally accessible public spaces and community institutions; our architecture and landscape design should celebrate local history, climate, ecology, and building practice.

The economic case for tackling emergencies such as climate change and resource depletion is now stronger than ever. Harkening back to the "New Deal", the current financial crisis presents a rare opportunity for fundamental change, not an obstacle as some would suggest. A revitalized Official Plan will help point the way to a happier, more secure and sustainable future in a Cobourg we can all be proud to call home.

Citizens for a Sustainable Cobourg thanks the Town of Cobourg for inviting us to participate in the Official Plan Review. We hope that our perspective and suggestions will help decision makers in their efforts to set the direction for growth and development in Cobourg.

## ***Appendix A: About Citizens for a Sustainable Cobourg***

Citizens for a Sustainable Cobourg (CSC) was formed in the summer of 2008 to organize or participate in local environmental projects, educate and increase the public's understanding of the environment and its importance, develop and offer programs promoting the protection and preservation of the environment, and conduct and disseminate research relating to the environment.

Current areas of concern include urban planning, energy conservation and renewable energy, water quality and protection, waste reduction, climate change, farmland protection, transportation, health, developing a sustainable, local economy, and enhancing the quality of life in Cobourg.

CSC's focus is primarily on the Town of Cobourg, but planning and growth issues in surrounding towns and rural areas (the 'environs') are also within the scope of the CSC vision.

To date, the CSC has made presentations and/or proposals to Cobourg Council, Cobourg's Planning and Environmental advisory committees, Cobourg Economic Development staff, Mayor Delanty's Kraft Plant Task Force, and third-party developers with a commitment to sustainable development. The CSC is a registered stakeholder in the Cobourg Official Plan Review process.

### **Contact information**

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## Appendix B: Sustainability Objectives, Specific Objectives and Strategies

GLOBAL CHALLENGE	SUSTAINABILITY OBJECTIVES	SPECIFIC OBJECTIVES AND STRATEGIES
Climate change due to human-induced build-up of carbon dioxide (CO <sub>2</sub> ) in the atmosphere	Sustainable carbon emissions	<p><i>By 2020 reduce CO<sub>2</sub> emissions from Cobourg by 30% below 1990 levels</i></p> <p>Implement energy efficiency in buildings and infrastructure; supply energy from on-site renewable sources, topped up by new off-site renewable supply where necessary.</p>
Waste from discarded products and packaging creating a huge disposal challenge while squandering valuable resources	Reduce and ultimately achieve Zero Waste Economy	<p><i>Eliminate waste flows to landfill and for incineration</i></p> <p>Reduce waste generation through improved design; encourage re-use, recycling and composting; generate energy from waste cleanly; eliminate the concept of waste as part of a resource-efficient society.</p>
Travel by car and airplane causing climate change, air and noise pollution, and congestion	Promote access (to goods, services, employment, education, recreation, etc) while reducing vehicular traffic	<p><i>Reduce reliance on private vehicles and achieve major reductions of CO<sub>2</sub> emissions from transport</i></p> <p>Provide transport systems and infrastructure that reduce dependence on fossil fuel use, e.g. by cars. Offset carbon emissions from car travel.</p>
Destructive patterns of resource exploitation and use of non-local materials in construction and manufacture increasing environmental harm and reducing gains to the local economy	Use of local and renewable materials	<p><i>Transform materials supply to the point where it has a net positive impact on the environment and local economy</i></p> <p>Where possible, use local, reclaimed, renewable and recycled materials in construction and products, which minimises transport emissions, spurs investment in local natural resource stocks and boosts the local economy.</p>
Industrial agriculture producing food of uncertain quality and harming local ecosystems, and consumption of non-local food imposing high transport impacts	Local and sustainable food production	<p><i>Transform food supply to the point where it has a net positive impact on the environment, local economy, and people's well-being</i></p> <p>Support local and low impact food production that provides healthy, quality food, while boosting the local economy in an environmentally beneficial manner; showcase examples of low-impact packaging, processing, and disposal; highlight benefits of a low-impact diet.</p>

<b>GLOBAL CHALLENGE</b>	<b>SUSTAINABILITY OBJECTIVES</b>	<b>SPECIFIC OBJECTIVES AND STRATEGIES</b>
Loss of biodiversity and habitats due to development in natural areas and overexploitation of natural resources	Natural habitats and wildlife protection	<i>Regenerate degraded environments and halt biodiversity loss</i>  Protect or regenerate existing natural environments and the habitats they provide to fauna and flora; create new habitats.
Pollution and overconsumption of local supplies of freshwater, and disruption of hydrological cycles	Water source protection	<i>Achieve a positive impact on local water resources and supply</i>  Implement water use efficiency measures, re-use, and recycling; minimize water extraction and pollution; foster sustainable water and sewage management; restore natural water cycles.
Local cultural heritage being lost throughout the world due to globalization, resulting in a loss of local identity and wisdom	Culture and heritage conservation	<i>Protect and build on local cultural heritage and diversity</i>  Celebrate and revive cultural heritage and the sense of local and regional identity; choose structures and systems that build on this heritage; foster a new culture of sustainability.
Poverty, even in the industrialized world, but especially in the developing world where people cannot meet their basic needs from what they produce or sell	Equity and fair trade	<i>Ensure that the Cobourg community has a positive impact on surrounding communities</i>  Promote equity and fair trading relationships to ensure the Cobourg community has a beneficial impact on other communities both locally and globally, notably disadvantaged communities.
Increasing divergence between rising wealth and greater health and happiness, raising questions about the true basis of well-being and contentment	Health and happiness	<i>Increase health and quality of life of Cobourg residents and others</i>  Promote healthy lifestyles and physical, mental & spiritual well-being through well-designed structures and community engagement measures, as well as by delivering on social and environmental targets.

## **Appendix C: Dardesheim - Germany's Renewable Energy Town**

*By Paul Gipe, January 25, 2007*

There are less than 1,000 souls in the town of Dardesheim. But the village and its 80,000 neighbors in the county of Halberstadt in the former East Germany have an expansive spirit. They want to become Germany's renewable energy city. They want to become 100% renewable using solar, wind, and biomass.

The renewable energy projects are part of the villages' efforts to create new jobs and businesses, increase energy security, and by doing so reduce international conflicts over energy. They want to do their part so they and others can live in peace.

This isn't the first time that the villages have been exposed to renewable energy. Four pioneering wind turbines were installed in the mid-1990s, collectively producing one million kWh per year. The more extensive project has been in the works since then.

To keep the population informed of the project's progress, organizers published a monthly newsletter, the Dardesheimer Windletter. This and other measures to encourage not just the community's acceptance but eager participation has been successful. In contrast to projects of this size elsewhere, Heinrich Bartelt noted that there was little if any opposition. Since the first turbine was installed in 1993, residents have remained supportive.

Bartelt should know. He installed those early turbines. Formerly with the Bundesverband WindEnergie, the German wind turbine owners association, Bartelt has made a personal commitment to the region.



*Farm Power. Solar PV in Dardesheim.  
Photo by Ziggy Kleinau.*

In 2006 they developed a 62 MW wind project comprising 28 Enercon E70s and one E112, a giant 6 MW turbine. The E112 alone is expected to produce from 12 to 15 million kWh per year, enough to meet the electrical needs of 4,000 households in this region of Germany. Altogether, the wind turbines will generate from 120 to 130 million kWh annually, enough to meet the needs of nearly all the 80,000 residents of the county.

The Dardesheim project includes an information center on renewable energy at a former Russian anti-ballistic missile radar station atop Druiberg. By the end of 2007, developers expect to install an Enercon E70 on the hilltop with an observation platform for tourists visiting the region north of the Harz mountains.

They also installed nine different solar PV plants: five private projects totalling 170 kW, and four projects at the Druiberg wind plant totalling 210 kW. During their first year of operation the combined 380 kW of solar PV generated nearly 250,000 kWh, about one-third of the Dardesheim's domestic electricity consumption.

Some 300 attended the festival opening the first-phase of the project on Whitsuntide in 2005. At the dedication, noted German author and activist Franz Alt, called the celebration a "festival of the spirit." Alt, a theologian known for his biblical allusions, called wind energy the "power of the spirit," a play on words in German denoting both the human spirit and the spirit of the creator. Alt called wind energy literally a "gift from the heavens."

Warming to his theme, Alt notes that in many old languages, "wind" is synonymous with the word for "spirit", as in the "holy spirit". "What you are doing here with your wind energy," said Alt, "is intelligent, economic, and forward thinking."

Proponents intend that the projects spread their economic benefits throughout the community. According to Bartelt, the community's investment in the project has become a development engine for the entire region. All the investment from the project stayed in the region, becoming the raw material for new local job creation. (Enercon in nearby Madgeburg employs 3,000 and has become the largest industrial employer in the state of Sachsen-Anhalt.)



*More solar farm power in Dardesheim.  
Photo by Ziggy Kleinau*

This willingness to share the benefits is reflected in the royalties paid for the land leases. Bartelt reported in an interview in the fall of 2006 that wind energy land leases (pacht in German) pay typically 3%-5% of gross project revenues. But the royalty is not paid only to the landowner where a turbine stands, but to nearby landowners as well. In the Dardesheim projects, for example, Bartelt sets aside 1% of this 5% for the nearest villages. Of this 1% a portion is set aside for community groups, sports halls, and so on. Of the 4% remaining half is paid to the landowner (2%) with wind development and half (2%) is distributed among surrounding landowners. In this way, everyone benefits.

Bartelt's Dardesheim project also includes a biomass central heating plant that serves the entire village and local farmers use rapeseed to produce oil for local transport and farm machinery.

The economic fallout has been immediate. Enercon has opened an eight person service center in Dardesheim and in the nearby village of Rohrsheim the former black smith employs 2 colleagues to maintain the old two-blade machines.

Hikers, joggers, and bicyclists can enjoy the wind farm or grab a cup of coffee at a nearby guest house. The people of Dardesheim have built a model community and model energy supply, doing their part to reduce their consumption of fossil fuels and build a future for their children.