

*WELCOME TO THIS PRESENTATION AND THANK
YOU TO HCDC FOR THE OPPORTUNITY!*

I PROPOSE TO ASK A QUESTION:

*Could Haliburton County become a
major Canadian hub of environmental
initiatives?*

A Wonderful Place



**Haliburton is a great
Canadian beauty spot**

Lakes

Forests

Wildlife



Haliburton Has....



Fleming College

Haliburton Forest

Murray Schafer

The Sculpture Forest

U-links

School of the Arts



Abbey North, Haliburton



**COLLECTIVELY, WE FACE
A MAJOR PLANETARY CRISIS.**

Planetary Crisis



Carbon dioxide concentration in the atmosphere before the industrial revolution, 250 years ago, was **280** ppmv (parts per million by volume).

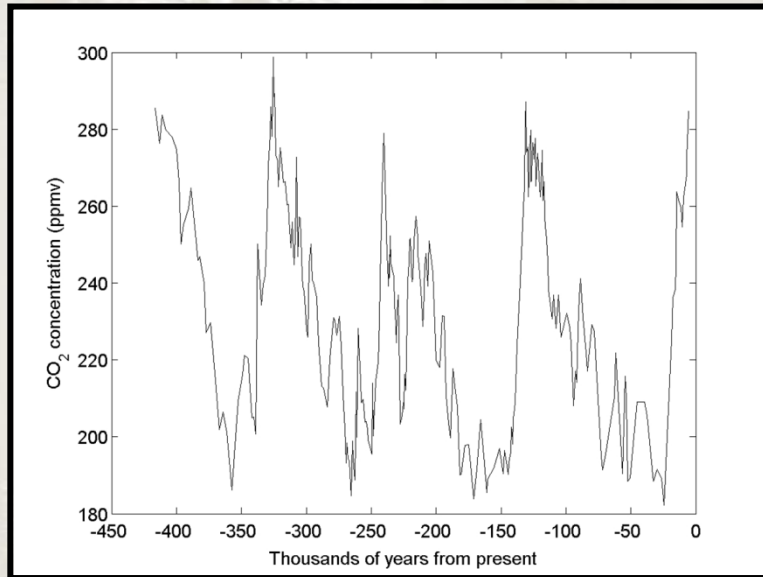
It has not been as high as **300** ppmv for at least 20 million years.

Today it is at **387** ppmv and rising faster than at any time in human history, despite the Kyoto Protocol and international efforts to curb carbon.

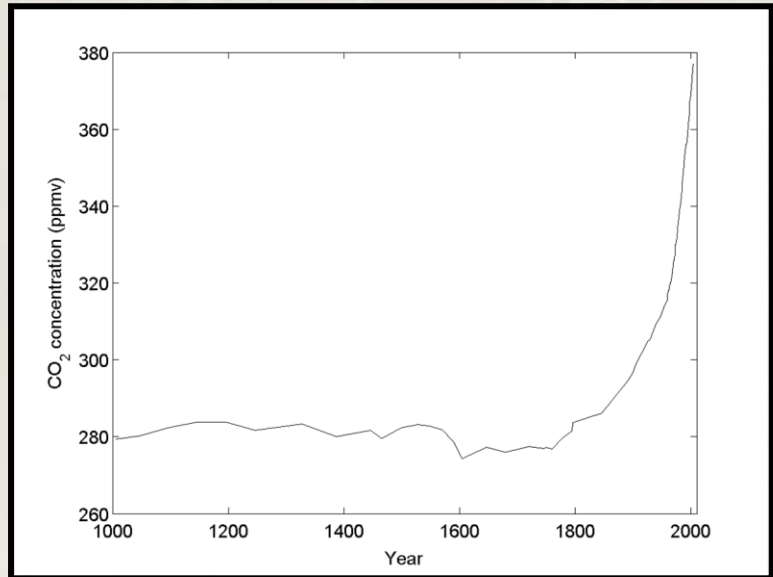
Planetary Crisis



Atmospheric CO₂ concentrations during the past 420,000 years based on the composition of air entrapped in the Vostok ice core.



Atmospheric CO₂ concentrations since the year 1000 AD estimated from ice core data and monitoring of CO₂ at Mauna Loa



Planetary Crisis



Once the carbon dioxide concentration in the atmosphere reaches **450** ppmv, conservative estimates (for example, the Intergovernmental Panel on Climate Change or IPCC) say that roughly 20% of the planet's current species will have gone extinct.

That could well be in the next few decades unless the world moves to cut emissions **AND** concentrations of carbon dioxide in the atmosphere.

Planetary Crisis



Predictions are that concentrations of carbon dioxide will reach **560** ppmv by 2065.

At that concentration, as many as 70 per cent of the planet's current forms of life will go extinct, meaning it will be a mass extinction spasm.

There have only been five of these in the history of life on the planet.

The last happened 65 million years ago when the dinosaurs (and a lot of other stuff) went extinct.

Planetary Crisis



The very best brains in the world are saying that carbon dioxide concentrations must fall to **350** ppmv for life as we know it to prevail on Earth.

Every molecule of carbon counts



In the words of Alanna Mitchell:

"We are at a highly unusual time in the planet's history when every single molecule of carbon dioxide counts.

For the sake of life as we know it on the planet, we must cut emissions of carbon dioxide. We must reduce the carbon footprint of every individual in the world."

Every molecule of carbon counts



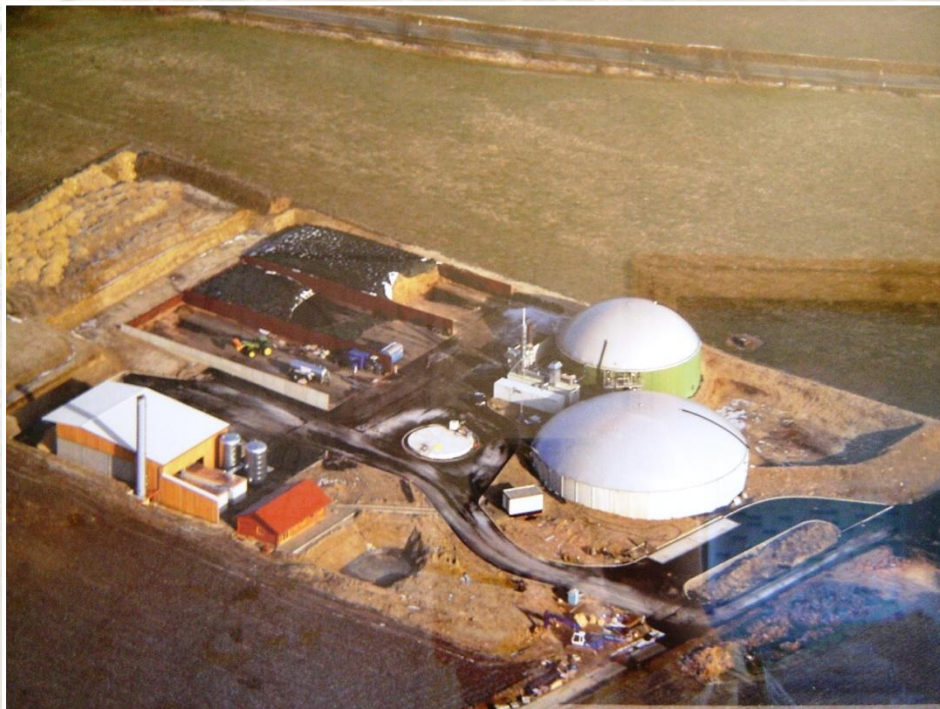
“Doing it on the scale of a whole county – (such as Haliburton) – where everyone can pull together to use less carbon in their own lives AND do their spending and economic production in the local region, is a huge benefit.”

And if we do it, others will follow.

**We Canadians have been woefully
slow in responding**

Jühnde, Germany

Abbay North



HCDC Presentation : J.Patterson : Jan.30, 2009

Jühnde, Germany



The Eden Project



SW England in Cornwall

**An old china clay mining pit to supply factories that
make bone china**

The Eden Project

Abby North



The Eden Project

Abby North



The Eden Project

Abby North



The Eden Project

Abbey North



Inside Eden

Abbey North



Inside Eden

Abbey North



Spring at Eden

Abbey North



Summer at Eden



Autumn at Eden



Winter at Eden



Eden at night

Abbey North



Eden's "Flashbulb Mania" winner

Abby North



EDEN is a huge DRAW



**Now, the Eden Project hosts
2 million visitors a year**

SOME HAVE BEEN WONDERING....

*A POSSIBLE
HALIBURTON INITIATIVE*

“ABBHEY GARDENS”

“7 GENERATIONS”

What if...



**What if a place of
beauty,
demonstration
and education
were established
here?**



Haliburton in spring



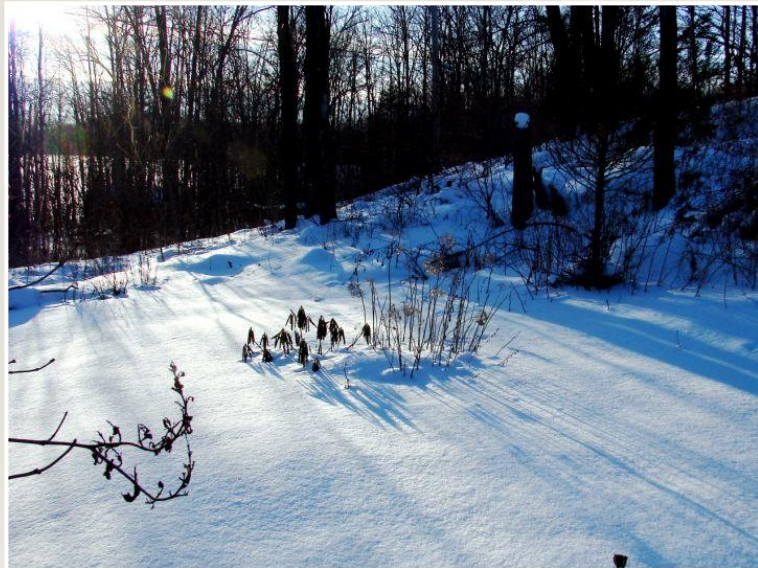
Haliburton in summer



Haliburton in autumn



Haliburton in winter



Existing Initiatives



Churches

Farmers

Local Food Group

CSA – the Tylers

Solar panels

Windmills

People's own vegetable
gardens



**What if Haliburton
were to take a lead
in Canada in caring
for our environment,
county-wide ?**

- ▲ Growing our food locally and sustainably
- ▲ Generating our own electricity locally and sustainably
- ▲ Reclaiming much of what goes into our landfills for re-use
- ▲ Composting our kitchen and yard wastes
- ▲ Building and improving our homes with their carbon footprints in mind

What if...



What if a site were designed to attract people to come and see what is possible?

With...

- ▲ Greenhouses and outdoor gardens
- ▲ Solar and wind farms for electricity generation
- ▲ Waste treatment wetland
- ▲ Bio-energy plant
- ▲ Staff living quarters that are environmentally friendly

What if we included...



An education centre to teach families

A kitchen area for both training and preparing meals for a 100-mile diet restaurant

An energy plant for heat and power

A vegetable outlet

A gift shop – all enviro-friendly products

A composting area

Maybe even a B and B for overnight guests



What if we included, perhaps...

An outdoor concert area – an amphitheatre

A centre for innovation and incubation of new ideas

A series of walks, with items of interest clearly sign-posted



"Abbey Gardens" Artist Rendering

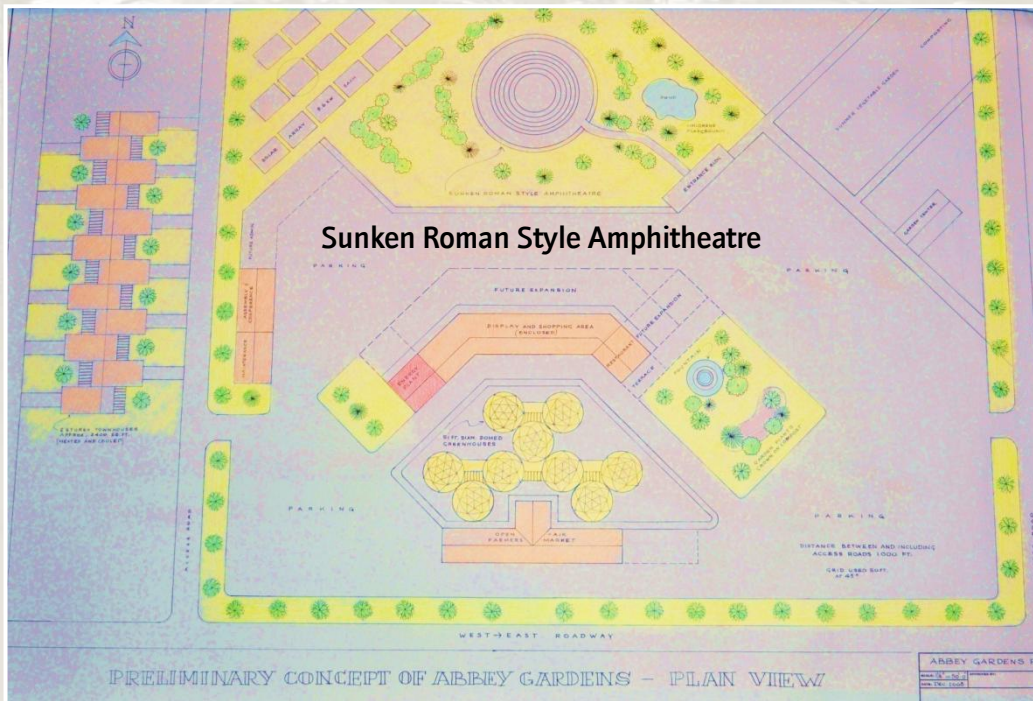


Artist: Ted Radema

2-story 2400 sq. ft.
townhouses

51 ft. diameter
dome greenhouses

Wind turbines to
be placed on
western ridge



Composting

Summer vegetable
garden

Garden Centre

Access roads

Parking

Distance between and including
access roads 1000 ft.

Grid used 50 ft at 45 degrees

“Abbey Gardens” Artist Rendering



“Abbey Gardens” Artist Rendering



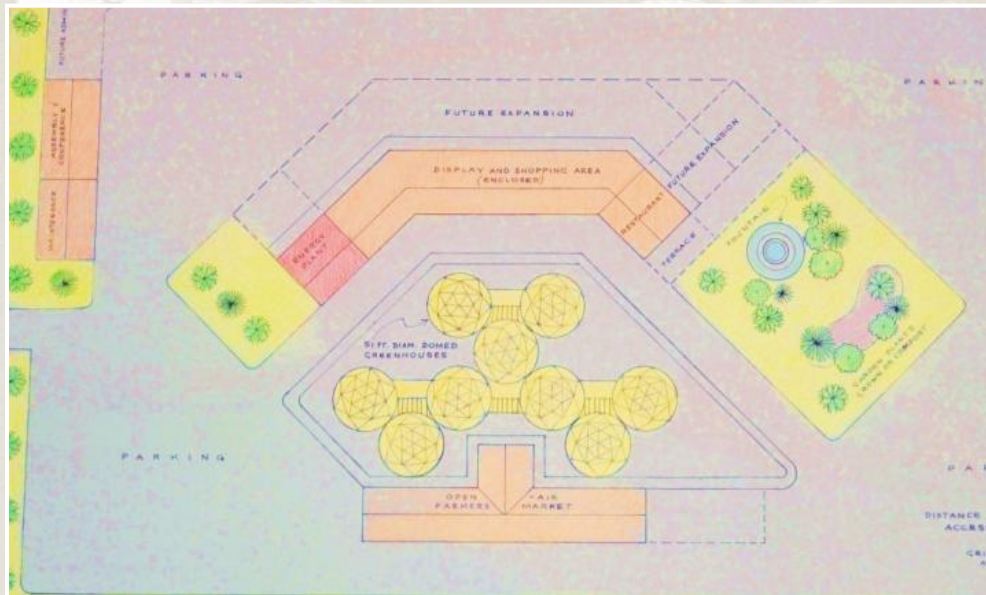
Display and shopping area

Future Admin

Assembly &
Conference

Maintenance

Energy plant



Future expansion

Restaurant

Terrace

Fountain

Garden plants
grown on
compost

Open-air farmers market

"Abbey Gardens" Sketches & Studies

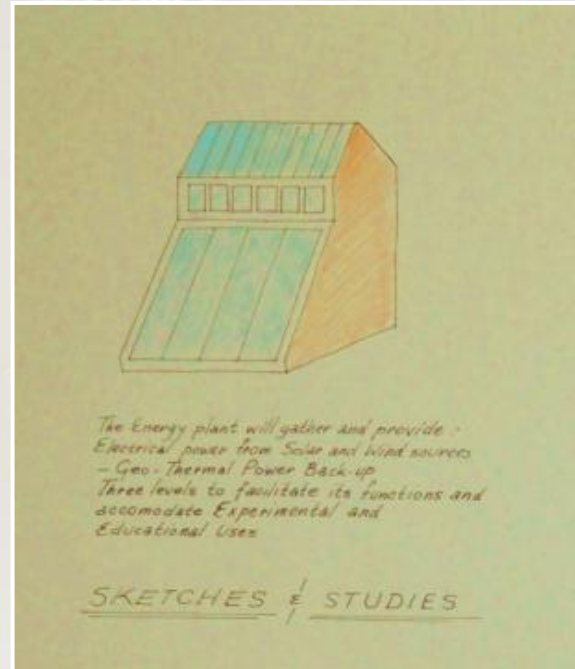


The energy plant will gather and
provide:

Electrical power from solar and
wind sources

Geothermal power backup

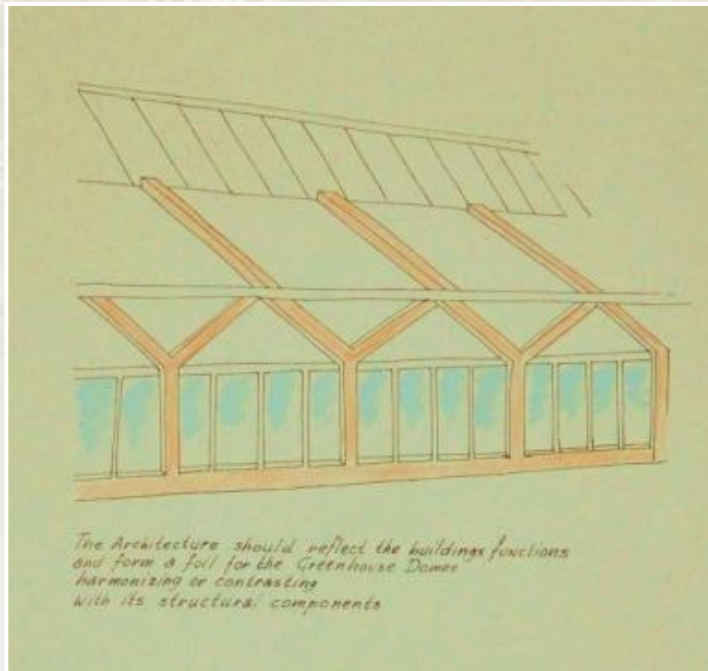
Three levels to facilitate its function
and accommodate experimental
and educational uses



“Abbey Gardens” Sketches & Studies



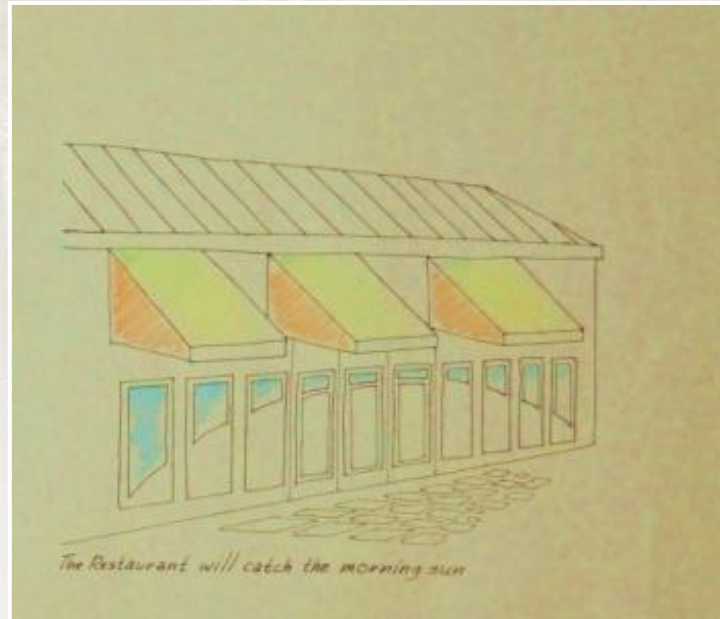
The architecture should reflect the building's functions and form a foil for the Greenhouse Domes, harmonizing or contrasting with its structural components.



“Abbey Gardens” Sketches & Studies



**The Restaurant will
catch the morning sun**



“Abbey Gardens” Sketches & Studies



Townhouses with basements
– porches and skylights –
privacy provided by garages.

**Heated and cooled by the
Energy Plant**

**Approximately 2400 sq ft
each**



Beyond “Abbey Gardens”...Encouraging others



We see countless opportunities for others to implement the best ideas throughout the county

Abbey North's coming greenhouse



Abbey North's coming solar installation



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Abbey North's wind turbine



What we are speaking of is...



An action research project aimed at developing a county-wide demonstration of food and energy sustainability in Haliburton County - one that will attract and teach others practical approaches for a dramatic reduction in the county's carbon footprint and solving this planetary crisis - locally.

Another Question



Is it possible?

If we do it, others will follow.