CENTRE FOR LOCAL PROSPERITY
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"We know there are no more chances. It is not going away, and today is the time to get it right in dealing with the climate crisis. Our world will live with it for the rest of our history, just as we have lived with the 20th century legacy of nuclear war. Our shared duty now, as one people, is to protect and repair our Earth, even as we prepare ourselves for its future unknowns."

Pugwash, Nova Scotia

Climate Change and the Human Prospect

Outcomes of the 60th Anniversary Retreat | Thinkers Lodge, Pugwash

Nova Scotia | September 28 – October 1, 2017

A Hopi Elder Speaks

"You have been telling the people that this is the Eleventh Hour. Now you must go back and tell the people that this is The Hour and there are things to be considered:

Where are you living?

What are you doing?

What are your relationships?

Are you in right relation?

Where is your water?

Know your garden.

It is time to speak your Truth. Create your community. Be good to each other and do not look outside yourself for the leader."

Then he clasped his hands together, smiled, and said, "This could be a good time!"

"There is a river flowing now very fast. It is so great and swift that there are those who will be afraid. They will try to hold on to the shore. They will feel they are torn apart and will suffer greatly.

Now the river has its destination. The elders say we must let go of the shore, push off into the middle of the river, keep our eyes open, and our heads above water. And I say, see who is in there with you and celebrate. At this time in history, we are to take nothing personally, least of all ourselves. For the moment that we do, our spiritual growth and journey comes to a halt.

The time for the lone wolf is over. Gather yourselves! Banish the word struggle from your attitude and your vocabulary. All that we do now must be done in a sacred manner and in celebration.

We are the ones we've been waiting for."

—Attributed to Don Evegouma, a 107 yr. old Hopi Elder, greeting his people at a gathering of the Arizona Hopi Nation in August 1999, Oraibi, Arizona

Climate Change and The Human Prospect

In 1957 during the height of the Cold War, the Thinkers Lodge in Pugwash, Nova Scotia was host to the inaugural Pugwash Conference on Science and World Affairs. Hosted by philanthropist Cyrus Eaton, twenty-two eminent individuals including top-level scientists from both sides of the Iron Curtain, Nobel laureates, and thought leaders met to discuss the threat of nuclear weapons and the responsibility of scientists to work for their eradication. This courageous and groundbreaking meeting launched the Pugwash Movement, an influential transnational organization for nuclear disarmament and led to the 1995 Nobel Prize for Peace, jointly shared by Joseph Rotblat and the Pugwash Conference."

Sixty years after the original Pugwash Retreat, humankind faces the legacy of an industrialized world, Climate Change. It is the defining crisis of our times, and as citizens of this Earth, we recognize and acknowledge it is a tragedy of our own making.

> "We're screwed. It's our fault.
> There's nothing we can do about it.
> It's going to get worse"
>
> —Thinkers Retreat

Already, we are experiencing radical change and devastating losses in our natural world from too much or not enough water, and as the Earth warms, extreme weather patterns will continue to threaten life, as we know it. Concerted and collective efforts to lower greenhouse gas (GHG) emissions are imperative. Mitigating Climate Change, let alone reversing it, requires not only a revolution in attitude, but a shift from talk to action, immediately and by all.

Technologies and solutions exist today that could help counter the crisis. And although it's widely agreed that something must and can be done, conflicting political, economic and societal agendas remain barriers preventing the coalescence of sensibilities and coordination of effort critical to global action.

Within this paradoxical milieu, small, rural and coastal communities are feeling devastating impacts, right now, as they struggle to manage the impact of a changing climate on infrastructure, natural resources and livelihoods. Rather than wait for solutions to come to them, they have elected to take conscious action.

2017 Thinkers Retreat

The original 1957 Thinkers' Lodge Retreat is an important symbol of the Pugwash Movement, acting as a beacon for world peace and what can be done when you work together as one.

Inspired by this original gathering and armed with a conviction that local action is not only possible, but the path forward, 24 global and regional Thinkers, representing all aspects of community life, gathered for two and a half days of intense, intentional conversation focused on actionable, locally-focused and forward-motion Climate Change plans.

> "Smaller and more autonomous communities are in better position to mobilize resources and implement solutions."
>
> —Thinkers Retreat

This document captures the essence of these Retreat discussions and the resulting outcomes.

**Full documents of the retreat are available upon request.*

Atlantic Rural Communities in Brief

Recent StatsCan numbers show almost 20% of Canadians live in rural areas, and of that population, Atlantic Provinces are home to the largest proportion. Such municipalities are small enough to be intimate with their population and close to rich resources such as universities and natural resources to offer an unparalleled quality of life. These rural communities, however, also face economic factors unique to a low populous. Struggles to stay vibrant and healthy are ongoing and too often compromised by a prevailing political opinion that Atlantic prosperity demands centralization of services and urbanization of rural populations. Ironically, the government's failure to empty rural communities through continuous withdrawal of support systems has served to speak volumes to the desire and capacity of rural communities to survive.

> "We need to be aware of our place in the land and our ability to be flexible. We can each work within our local communities to help create resilient, vibrant and healthy places to live that are adaptive to Climate Change."
>
> —Thinkers Retreat

The Atlantic region's rural communities are the right scale to experiment with action-based change models. Being primarily self-governing entities, rural communities operate with a large degree of autonomy, allowing for a greater flexibility and adaptability. Government and industry involvement is less of an expectation. Waiting for government or industry to step outside typically cautious, conservative and risk-averse positions isn't necessary to decision-making. With less red tape and fewer governmental layers, communities can plan and implement change with greater ease than larger urban cities.

Smaller communities also have a different mindset, recognizing that in times of crisis, their shared ethics and values can be shaped in self-help ways for community benefit. Opportunity exists in mobilizing these voices to help architect Climate Change solutions that focus on the practical and achievable. With a hyper-local point of view, like-minded Climate Change organizers inside rural communities, eager for solutions and change, are more easily heard and able to execute on innovative ideas and projects.

> "Our vision is that the Atlantic provinces act collectively, and by taking direct action at the community level, become a world leader in reversing global warming by drawing down more carbon than it produces, while ensuring environmental justice and economic prosperity."
>
> —Thinkers Retreat

Retreat Goals

The 2017 Thinkers' Lodge Climate Change Retreat had the following goals:

1. Create a new community-level narrative to frame Climate Change issues to provide a strong vision for the future and actionable ownership by all community residents;

2. Identify sustainable and economically viable solutions with the potential to contribute to GHG emission reductions and counter weather and sea level impacts, while providing opportunities for more stable community prosperity;

3. Develop municipal, locally-focused policies, programs and projects to: catalyze and support grassroots economic development that is non-prescriptive; supports transformation to a low-carbon economy; provides financial incentives; and generates ongoing opportunities for a healthy, productive rural community that have the power to act as models for other Canadian communities.

Case Study: Municipal Innovation Solution

SPRINGHILL MINE WATER GEOTHERMAL PARK

Springhill has a strong desire to contribute to the reduction of GHG emissions and stimulate the economy in rural Nova Scotia. An innovative initiative is helping to address both objectives, while providing clean, affordable energy to businesses in the community.

The town is home to some of the deepest coal mines in Canada, long since abandoned and naturally flooded. This extensive mine structure now contains a large volume of geothermally heated water, with temperatures between 15 and 18 degrees Celsius. It is believed at lower depths the water is even warmer.

The Municipality of Cumberland owns a mineral rights lease to the mine water resource and is building an industrial park in Springhill through its incorporated Cumberland Energy Authority (CEA). The project will use the mine water as a heating resource. The water will be accessed via wells, pumped to the surface, and upon reaching buildings, heat will be extracted using heat pumps. The water will then returned to the mine passages below. Businesses located in the park will be able to tap into this renewable heat energy source for significant savings on heating costs, while reducing their environmental footprint. Currently, there are 5 businesses in Springhill using the geothermal resource.

Studies conducted by the CEA to evaluate benefits have shown that a business can save up to 78% of heat energy costs by using geothermal versus traditional heat sources such as oil or standard electric, with similar reductions in greenhouse gas emissions. Moving forward, the CEA will build a district energy system to supply heat to new businesses and construct a full service industrial park with new roads and infrastructure.

When completed, the Springhill Geothermal Industrial Park expects to attract new business tenants to the Park, revitalizing Cumberland County's economy and community, while making it achievable for tenants to use significantly less heat energy and produce less carbon emissions than otherwise possible. This will have a strong, positive impact both in combating climate change and enabling economic stability in rural Nova Scotia.

Outcomes of the 60th Anniversary Retreat

Retreat Format

Day 1: In both large and smaller sub-groups, Thinkers discussed and explored a list of topics. At the outset, four key considerations (listed below) were brought to the group to feed into the conversations. Discussions topics covered education and awareness of the impact of climate change in local communities and across the region; how to initiate important conversations that can propel change; easy first steps for municipal polices and programs as investments, not costs; new and dynamic models for energy, forestry and agriculture that create more jobs and economic value while co-existing in harmony with the earth; and how to create healthy investment ecosystems for these changes. At the end of Day 1 discussions, the group identified and shared obstacles and advantages as important threads for Day 2 conversations.

Day 2: Thinkers took a deep dive into five topic areas identified by the group. Discussions were related to or fed into best practice examples and actions that had the capacity to replace fossil fuels, reduce and/or sequester carbon as a part of Drawdown solutions, and the capacity to transform 'business as usual' through regional solutions while retaining quality of life.

4 Key Considerations: Four threads, or discussion filters, utilized during the retreat process**.**

1. Drawdown.org: "*The point at which greenhouse gas concentrations in the atmosphere begin to decline on a year-to-year basis. Drawdown is a goal for reversing climate change and eventually reducing global average temperatures*."
Accessible to all individuals, Drawdown.org provides an open source platform to encourage and facilitate worldwide exchange and sharing of Climate Change data and change models. Achieving drawdown requires broad sector level changes, top down and bottom up, to reach a point of stabilization. Project Drawdown representation allowed Thinkers the opportunity to weight potential solutions against a host of climate change data for best practice solutions.

2. Municipal Climate Change Action Plan
Nova Scotia's Municipal Climate Change Action Plan (MCCAP) targets the reduction of provincial GHG emissions by 10% of 1990 levels by 2020. The MCCAP is designed to help municipalities better understand climate change, with specific regard to the nature of these communities, the effects experienced and what to do such as general preparedness, leveraging of group solutions, and developing mitigation strategies.

3. Wisdom Traditions as Narrative Changers
The Atlantic Mi'qmaw Indigenous population's belief system positions humans as "stewards of the land," with accountability stretching seven generations hence. To ally with a philosophy that practices a harmony that preserves and protects natural resources means humankind must change the extract-and-exploit paradigm, not only acting but also thinking differently. Eastern philosophies, particularly the Shambhala Tradition, emphasize earth protection and non-aggression towards the earth, its resources and within human culture.

4. Locally Actionable for Building Economic Resilience
Climate Change solutions to mitigate, adapt to and counter impacts have the capacity to positively transform rural communities faster than larger, urban populations. Acting locally, however, requires a systems approach whereby strategies are interlinked rather than stand-alones. This can be accomplished by identifying incentives and enabling factors that can feed into rural communities at grassroots level to effect transformational change. Discussions focused on how to envision, describe, facilitate and support this process, along with identification of crucial partnerships and alliances.

DAY 1 – Obstacles and Advantages: The first day of the retreat highlighted a number of obstacles to community change as well as advantages available to those communities.

Obstacles to Change

A "Wicked Problem": Climate Change has been described as a "Wicked Problem." The term 'wicked' in this context is used, not in the sense of evil, but as a crossword puzzle addict or mathematician would use it—an issue highly resistant to resolution. Climate change involves multiple causal factors and high levels of disagreement about the nature of the problem and the best way to tackle it. The motivation and behaviour of individuals is a key part of the solution as is the involvement of all levels of government and a wide range of non-government organisations [see Epilogue]

Climate Fatigue: The threats imposed by global warming have been with us for a long time, yet many people either do not believe the data or they do not connect with these issues on a personal level. Although general awareness is there, it may not "hit home" until communities experience the impacts directly.

Lack of Education: The relationship between global warming and Climate Change and our use of fossil fuels is often not well understood. Populations typically do not do the math between Climate Change and energy transition.

Government Short-term Thinking: Government inclination is to go for the quick hits, investing in the cheapest way forward, directing money towards rapid results without thinking long-term. Work is required to get more municipalities on board to collaborate and work together.

Economic Incentives: Currently, there are few government incentives available for lowering carbon emissions. More government funding needs to be directed into clean energy as an economic development incentive. Heavy lobbying by fossil fuel companies continues to divert government funding into subsidies for these companies.

Community Engagement: More and better community leaders are required to build and increase residents' engagement. They will need to identify and liberate resources at local levels to build capacity in a unified awareness program.

Shared Advantages

Math of Opportunity: Better economies of scale can be achieved by municipalities and communities working as a collective to share knowledge and skills, which can then determine incentives and costs for individual pathways.

UNSM Partnership: The Union of NS Municipalities is available to work with all municipalities on best education and practices, and to create a unified voice to the province, acting as a role model for all.

Solution Mapping: Municipalities sharing as a group provides capacity to identify and leverage innovative solutions within rural communities that may otherwise occur under the radar.

Alignment: Communities can tie into initiatives and mandates, such as the MCCAPs and the National agenda on reducing GHG emissions (the Paris Accord), to forge an integrated way forward

Shared Audiences/Advocates: UNSM, municipalities, local businesses, non-profits, individuals, institutions and insurgents.

Provincial: Opportunities exist for municipalities and the provinces to collectively determine potential to stimulate an economic environment that favours transition—find early adopters, ensure grids green & smarten faster, change or bolster rules for cap and trade to fund the work—and tie a province's priorities to make it attractive for federal government to invest.

DAY 2 – A Deep Dive into Risks, Challenges and Outcomes: Day 2 highlighted related topic areas, with exploration into associated risks and challenges as well as possible actionable outcomes.

Deep Dive Topic Areas

1. Localizing Project Drawdown solutions
2. Moving money to finance solutions
3. Energy, carbon forestry & farming, ocean management.
4. Treaty rights as a leverage point for change
5. Educational process & community engagement

1. Localizing Project Drawdown Solutions

Discussion Summary:

It is technologically possible for Canada to become a zero-carbon emission society. Right now. The power of 50 Nova Scotia municipalities to achieve Drawdown targets is significant. What stands in the way are political, financial and sociological barriers. The overarching mindset and cultural narrative needs to move from a 'growth and extraction' model to one that favours eco-friendly and financially viable solutions that can contribute to Drawdown.

Achieving Drawdown at the local level requires transformative thinking that reconsiders humankind's relationship to the environment. The core principles for Drawdown solutions must encompass (i) commitment to lowering carbon emissions, (ii) collaboration between partners, and (iii) feedback mechanisms that allow sharing of collective information.

Drawdown Commitment Risk/Challenges:

Is it possible to establish a consortium of municipalities forming a 'Drawdown Atlantic' working group? Acknowledging a goal provides significant motivation – but is it reasonable to set a goal? With the dramatic scope of work to be accomplished, does the suggestion for an initial drawdown target such as 2025 run the risk of being criticized as impossibility? Conversely, to not set a date means there is no target for which to strive. Stretching a date further out, for example to 2060, will dampen spirits and enthusiasm. How to you best connect the dots between energy usage and GHG emissions?

Actionable Retreat Outcomes:

Municipal:

1. Build capacity by mobilizing champions and setting community-scale Drawdown goals.
2. Educate community residents through public consulations & engagement.
3. Create energy/resiliency plans as the principal economic development strategy.
4. Work together as a community to break silos, collaborate and seek out best practices.
5. Explore and share out-of-the-box solutions such as Energize Bridgewater, Springhill Geothermal and Summerside Smart Grid.
6. Consider and select solutions that suit the strengths of community and will help accomplish that goal.
7. Balance risk/challenges with imagination, resources and money.

Provincal & Federal:

1. Work to remove policy barriers.
2. Create models for solutions with municipalities as partner.
3. Investigate stategies for municipal and provincial investment, and challenge issues with Cap & Trade, grid greening and decentalization.

ENERGIZE BRIDGEWATER

Energize Bridgewater is a community-wide initiative that will accelerate Bridgewater's transition toward a clean energy economy. The plan forms the foundation for an ambitious economic development strategy, focused on energy efficiency, renewable energy and capacity building.

The project will encompass an unprecedented investment in clean local infrastructure and equipment utilizing 3 strategies:
1. Energy efficient buildings with deep retrofits and superior standards for new construction - $153 million.
2. New community-scale energy systems deploying large-scale solar, wind and hydro as well as district energy and storage - $157 million.
3. Clean and active transportation systems, including electric vehicles, expanded public transportation and better land use efficiency - $65 million.

Energy currently costs Bridgewater $88 million per year (2012 data), while housing energy costs over $20 million per year, with an average household spending about $6,500 on energy. The commercial, institutional and industrial sectors spend $49 million per year on energy for their facilities (approx. $54 per sq. meter).

Upon completion, the project is expected to save over $2 billion in energy costs over the next 33 years and reduce GHG emissions by 80%. Cost savings will be realized through the energy improvements such as upgrades and energy awareness training. Deep retrofits will bring housing energy costs into the $430/household/year within 33 years (2018-2050). The town's Clean Energy Financing program will provide home energy upgrade financing, unencumbered by onerous red tape.

Area businesses and organizations have already stepped up as active players in this initiative. These shifts will mean more money saved and available for reinvestment in the local economy, with these capital investments representing an economic driver for the community.

2. Moving Money to Finance Solutions

Discussion Summary:

The current paradigms for finance and investment in local economies need to be rethought as levers that are nothing less than transformative for local economies. Municipalities need to drive these new mindsets toward more innovative and robust financial pathways. Municipalities, along with provincial and federal governments, should be co-investors to stimulate the process. Additional stakeholders/investors are local businesses, individuals and institutions. The social impact of municipalities moving their money, creating portals for businesses and initiatives with new ideas about ownership and power, can fuel municipalities and Drawdown efforts.

Risk/Challenges:

There is a general disconnect in the belief that finance is a nice thing but not central to change. Realistically, without finance there are plans but no action. Many projects that can assist in Drawdown and mitigation in ways that stimulate local economies require funding over and above traditional sources (such as government) at the outset. There are great challenges in persuading provinces to provide a necessary back-stop to mitigate risk during periods of municipal change (i.e., de-risking grassroots investment with government funds). Changing investment guidelines to move investment into local, healthy investment ecosystems is complex and requires multi-layered government cooperation and changes in policy that involve balancing ecology with money.

Actionable Retreat Outcomes:

1. Identify investment opportunities/funds and potential returns on investments. Consider possible government bodies that can act as co-investors to stimulate the process and then switch to community players for long-term investment.
2. Focus on research. Conduct studies of how/where investment opportunities exist at the local level. Focus on the quality of businesses, carbon intensity and limits of impact investment.
3. Assemble a team to assess financial infrastructure through asset analysis of what exists and what is missing institutionally (i.e., tax credits, credit unions, coops, social enterprises, non-profits, political parties, philanthropists, etc.).
4. Generate list of businesses and projects looking for local investment.
5. Investigate financial models such as CEDIF support (fund pool, crowd-funding for infrastructure, one-off investments), Green Municipal Funds (Federation of Canadian Municipalities), investment co-ops (i.e., Alberta), and small business investor tax credits.

3. Energy, Carbon Forestry and Farming, Oceans Management

Discussion Summary:

Trends in municipal energy usages and sources are a key element in any climate change strategy. Fortunately, Atlantic Canada has some leading examples of municipalities at the cutting edge, including Bridgewater, NS, Springhill, NS, and Summerside, PEI. The efforts should be modeled and adopted into other communities in the region.

Carbon sequestration can greatly help. Forest management business models that feature annual payments to woodlot owners for carbon sequestration credits not only may be economically viable but may also change the silvicultural practices towards uneven-age sustained management. Woodlot owners get paid to grow instead of cut trees. Carbon farming implements farming practices that sequester carbon, removing it from the atmosphere by converting it to plant material or soil organic matter at a greater rate than carbon losses arising from excessive tillage, overgrazing or high rates of chemical fertilization. Carbon farming can be defined as “a

system of increasing carbon in terrestrial ecosystems for adaptation and climate change mitigation to enhance ecosystems, goods and services, and trade carbon credits for economic gains."

Radically new ocean management techniques are needed to address not only the dramatic decline in fin fish and shell fish stocks, but also the rapid changes occurring to ocean health due to acidification, lower oxygen content and rising water temperatures in the North Atlantic. Oceans will remain a significant carbon sink if marine ecosystems cannot be safeguarded. Ocean communities must be the leaders to lay the groundwork for efficient adaptation and mitigation strategies that focus on the most damaging impacts such as sea levels rising, changes in ocean currents, temperature increases, increased storm activity and changes in marine biodiversity to reduce ocean stress.

Risk/Challenges:
Alternative economic incentives are critical. There are only a few alternatives available to the standard industrial models, but these show promise. Alternative energy systems, while showing economic viability, are slow to be adopted by developers and local governments. In forestry, industrial timber interests are often foreign-owned and protected through government support subsidies intended to protect the status-quo model. Governments do not give economic value to, and financial incentives for, the amount of carbon sequestered by forests, which could be a credit when sold by private woodlot owners. Long-term landowners are often stubborn, impatient and/or resistant to change and new ideas. The dominant high-input farming model continues to be taught in agricultural schools and practiced in the region's larger farms, despite declining returns due to soil loss, diseases and other risks. Ocean harvesting generally continues to be conducted with large industrial gear with little regard to by-catch and health of marine ecosystems.

Actionable Retreat Outcomes:

1. Raise profile with general public and government on benefits of new strategies
2. Promote viable and potentially disruptive new models in forestry that could augment or replace the existing industrial model. These include:
   Carbon-credit forestry: Land owner coalitions which receive regular payments for demonstrated net carbon sequestration in their forests.
   High-value wood crafters co-ops: Organized co-operatives of wood crafters needing long-term supply of hardwoods from uneven aged forest management techniques.
   Institutional heating: Use of sustainable forest bio-wastes as chips for heating schools, hospitals and other institutional buildings, as a means to replace fossil fuels.
3. Educate farmers to adopt carbon-farming practices that can dramatically increase and preserve soil carbon, with benefits of Climate Change mitigation and improved crop yields.
   Mulch and other soil covers: Use organic mulches like hay, straw, wood chips or even crop residue to mitigate soil erosion and help fuel the soil's carbon cycle.
   Green manures and cover crops: Use to keep soil covered, manage weeds and soil moisture and provide fertility for subsequent crops. It takes the carbon equivalent of driving 1000 km to produce enough nitrogen fertilizer for one acre of corn (150 lbs.). Growing a perennial legume like alfalfa for 2 years will provide significantly more.
   Reduced-tillage: Reducing tilling operation frequency and/or adopting no-till systems can increase soil organic matter, reduce carbon oxidation and protect helpful soil microbes.
   Compost: Acting as a probiotic for the soil, inoculating soil with beneficial microbes helps cycle nutrients for your plants. Compost is a stable form of organic matter.

Management-Intensive Grazing: Choose practices such as mob-grazing to use extremely high stocking rates for short periods and allow for long rests for pasture recovery in between grazings. Employ a silvopastoral system incorporating trees and pastures.

4. New ocean management techniques focused on higher value, non-commodity products sold direct to high-end markets. These include:
   Hand-lined Cod: Returning to traditional long-term sustainable and ecologically friendly harvest techniques to produce a higher value catch. Fogo Island is an example.
   Trap-caught shrimp: Provides a higher value catch without by-catch and other wasteful side effects.

> "Everyone can and must do something, no matter how small, to reduce the human impact on our oceans. It's our moral and ethical responsibility to future generations and to the planet."
>
> —Thinkers Retreat

4. Treaty Rights as a Leverage Point for Change

Discussion Summary:

Asserting First Nations treaty rights could be a game changer for remediation, reclamation and climate justice. These rights can effect change by facilitating ways around political barriers and proposing new ideas for ownership, power, capital and finance, while shifting consciousness and points of view. Treaties are factual legal documents, which hold environmental rights and land stewardship at the forefront. With a commonly shared acceptance of treaty rights, a foundation for a nation-to-nation collaboration can be established, assisting in powerful new ways towards GHG emission reductions.

Risk/Challenges:

There are inherent issues translating treaties into the spirit and intent in which they were written, which is peace and friendship and to live in balance and harmony with the natural world. Government sanctioned Indigenous leaders tend toward corruption, while Indigenous populations have to do their own work around leadership. There are inherent difficulties due to fractures within Indigenous communities arising as an outcome of lack of leadership. For example, in what is called Cape Breton by Canada (and Unama'kik by the Mi'kmaq Nation), there are 7 ecological territories, some of which remain without leadership. Each area will require a different approach, depending on the community living in area boundaries and leadership status. Additionally, crown land (held in trust by government) in these areas and others is being exploited for oil and gas.

Actionable Retreat Outcomes: Relationship Building

1. Listen. Reach out to local Indigenous communities, one by one, to initiate relationships on their ground, including grass root leaders, elders, grandmothers and traditional district chiefs within each community.
2. Learn. Get to know and understand each community, their individual culture, issues and challenges and the resources required to preserve their culture.
3. Develop a best practices guide to describe how to build a relationship and establish trust with the indigenous communities.

5. Education Process and Community Engagement

Discussion Summary:

Education on Climate Change and environmental issues has been taking place for decades. In large part, it has been an easily dismissed narrative until now, when impacts are seen and felt locally and more apparent internationally. Top down and bottom up approaches can facilitate

change. It is imperative to connect the dots to illustrate the interconnectedness that doesn't show up in news reports, government budgets or the calculus of economic viability. It is important to understand the breadth of engagement and multi-layered communication necessary to meet people where they are that can lead to their buy-in. People need to see themselves in the picture, be able to articulate their place in the climate situation, and be empowered to see themselves as stewards of the land.

Risk/Challenges:

There's a concern that the educators, youth and members of communities do not have a good understanding of climate change and don't know what they can do about it. Information is abstract, often provided on a scale from science to panic, and too theoretic for complete understanding of the issues. Answers are often inaccessible. The difficulty interpreting the data is exacerbated by emotions, judgment and avoidance, resulting in a dismissal of the situation by individuals and groups. If a community can't see themselves as the problem or solution, they won't believe in it or move forward into it. Additionally, if change means a different standard of living, there is further resistance. How can such information be integrated into classrooms and curriculum? How can the science be summarized to bring it to the community level? Efforts are needed to describe what can be done and educate people about what they can do now and what they can do if/when a climate event happens.

Goals/Action:

1. Identify the main channels of communication within the community as well as leaders, and consider enlisting experienced go-to person to facilitate climate change conversations.
2. Explore local needs and Climate Change impact specific to individual communities.
3. Review communication channels and create distribution plan.
4. Investigate financial resources to provide education.
5. Collect stories and reflect them back to the community to provide inspiration.

Case Study: Community Engagement

USING DELIBERATIVE DEMOCRACY

Climate Change has been called a "super wicked" problem. Such wicked problems – complex, circular, systemic, and interdependent – invite new ways in which to view problems and find solutions. Project Drawdown is an example. However, whatever the solutions – whether mitigations or adaptations – all will require communities to find new ways to engage with potential solutions in light of their particular assets and liabilities, social networks, economics, demographics, diversity, and most importantly, values.

A strategy for community engagement that holds promise, and for which there is a growing body of theory and practice, is called deliberative democracy. Deliberative approaches involve participants reasoning together, hearing a diversity of perspectives, sharing values and weighing trade-offs, and coming to agreement. This process needs to be supported by good information and facilitation that includes legitimate framing of the problem, the opportunity for diverse and opposing viewpoints to be heard, and a diversity of formats for engagement that foster inclusivity.

A deliberative approach differs from other forms of social engagement by its emphasis on: (1) including the diversity of perspectives and circumstances within a community; (2) deliberating different perspectives and learning from the process; (3) having real influence to affect political outcomes; and (4) being rooted in participants values with opportunities to reflect and share, and to articulate common values.

These approaches are based on the principle: that citizens have a right and a responsibility to participate in decisions that affect their lives; that they are capable of doing so; and that the act of participating builds the capacity of citizens to participate effectively in decision-making processes. When citizens participate in this way, it increases trust in public policy decisions, creates greater public buy-in and results in higher quality decisions that incorporate more diversity of ideas and needs. Deliberative democracy approaches are particularly well-suited as a process for community engagement around the challenges of climate change.

NOTE: *The understandings and descriptions of deliberative democracy approaches were taken from the soon to be published book,* Public Deliberation on Climate Change: Lessons from Alberta Climate Dialogue, *edited by Lorelei L. Hanson, University of Athabasca Press.*

Municipalities: Actionable Retreat Outcomes

If you do nothing else within your Municipal government, do these things:

1. Sign on for the FCM Partners for Climate Protection (PCP) Initiative. Over 300 municipalities have joined, representing 65% of the Canadian population. This partnership provides Municipalities with a proven blueprint for measuring the GHG emissions of public and private sectors within the municipality, and monitoring ongoing progress in reducing those emissions. In addition, PCP will match Municipalities dollar for dollar as they engage in the process.

(Sample Motion: I move that the Municipality of _____ join the Federation of Canadian Municipalities Partners for Climate Protection Initiative)

2. Implement and promote a PACE funding program for home energy renovations in your municipality. The PACE structure makes it simple for residents, even those with lower incomes, to improve the energy efficiency of their homes, and even install energy generation equipment, without upfront cost, and at an ongoing cost that is less than the energy savings the renovations obtain.

(Sample Motion: I move that the Municipality of _____ implement and promote a PACE program to help our constituents affordably improve the energy efficiency of their homes)

3. Request that the Provincial Government and the Property Valuations Services Corporation alter their policy of providing reduced assessment rates for forestland so that clear-cut areas no longer qualify for the reduced rate and encourage woodlot owners to employ alternate cutting strategies and more active forest management plans.

4. Become early adopters of Electric Vehicle technologies, install free-access charging points at Municipal buildings, and convert at least one vehicle in their municipal fleet to an EV by 2020.

Centre for Local Prosperity Actionable Retreat Outcomes

The Centre for Local Prosperity had the good fortune of being offered the Thinkers Lodge as the place to host a group conversation on the impacts of global warming and the ensuing Climate Change on our region's small, rural communities. We took our inspiration from the original Pugwash conference on nuclear disarmament, and gathered a group of Thinkers to engage in intense reflection and dialogue for two and a half days. We wanted to be outrageous – to do the impossible – and we emerged with the inspiration to keep the conversation going.

This retreat was a beginning, a first step toward what we hope will be an ongoing and positive movement generating new ideas and innovations to help our communities survive and thrive in the midst of changes to come.

Having organized this Thinkers Lodge Climate Change Retreat, the Centre for Local Prosperity is examining possible next steps, which may include a Drawdown working group, and follow-on events such as further retreats, regional workshops or larger public conferences. Many of the Thinkers involved in this retreat have also stepped forward to help in many ways.

A follow-on video trailer and documentary on this retreat (when available) can be viewed on our website: www.centreforlocalprosperity.ca.

Other current information on Climate Change activities will be available on our site as well.

How Thinkers were chosen

Twenty-four Thinkers were chosen, closely mirroring the size of the original 1957 Pugwash conference. Thinkers represented all aspects of local community living, such as municipal governance, government policy and planning, volunteer sector community organizations, alternative energy programs, natural resources (forestry, fisheries, agriculture), arts & culture, personal transformation, business and First Nations. Additionally, individuals with international expertise in carbon sequestration (Project Drawdown), climate policy, and local investment and funding also attended.

The Thinkers

1. Gregory Heming – Councilor, Municipality of Annapolis County, PhD Ecology
2. Chad Frischmann - Drawdown Res Director & architect for the 100 Drawdown solutions
3. Michael Shuman – Well know author and expert on rebuilding local economies
4. Christine Heming – Meditation instructor and expert in personal transformation as a way to rebuild communities
5. Andy Horsnell – Co-founder of Common Good Solution, helping to build social enterprise
6. John Eaton - Pugwash Park Commissioner and grandson of Cyrus Eaton
7. Timothy Habinski - Warden, Mun. of Annapolis County, dynamic change maker
8. Graham Fisher - Senior planner, NS Dept of Mun. Affairs expert in climate change adaptation.
9. Ray Hickey – Chief Operating Officer, Cumberland Energy Authority, at the forefront of renewable energy
10. Albert Marshall – Respected and much loved elder at Eskasoni First Nation
11. Rebecca Moore – First nations community energy campaigner, educator, and drummer
12. Gordon Slade – Chair of Shorefast Foundation, recognized for community sustainability in NFLD-Labrador
13. Debbie Nielsen - Infrastructure & Sustainability Officer for the Union of Nova Scotia Municipalities (UNSM).
14. Rankin MacSween – President, New Dawn Enterprises, a not-for-profit social enterprise
15. Leon DeVreede - Sustainability Planner and lead for Energize Bridgewater
16. Dale Prest – Community Forest International, leader in carbon sequestration forestry
17. Av Singh – World traveled agriculture expert, focus on holistic system-based farming
18. Susan Tooke - Environmental artist, focused on the environment and preservation of wilderness.
19. Chris Ortenburger – Veterinary biologist, focus on Prince Edward Island community environmental issues and democratic rights
20. Christine Saulnier - NS Director of the Canadian Centre for Policy Alternatives & lead for NS's alternative provincial budget
21. Adam Fenech – UPEI Climate Lab, shared in the 2007 Nobel Peace Prize for the Intergovernmental Panel on Climate Change.
22. Gregor Wilson – Director, Wentworth Valley Developments, Board member of Wilson Fuels
23. Heather Johannesen - Ecological economist and sustainability planner, working at various levels of government
24. Regan Rosberg – Denver based artist & naturalist, investigating society's grief and melancholia related to the environment.

For more information about the Retreat and follow-on activities contact:

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Epilogue – The Super Wicked Problem of Climate Change

Climate Change falls into the classic case of a Wicked Problem, a term first used in social planning for problems that are not easily defined and cannot be successfully treated with traditional, linear, analytical approaches. The Climate Change wicked problem is characterized by:

- It is a problem that is difficult to define. There is debate concerning the causes, extent and solutions.
- It has many interdependencies and is multi-causal. Solutions often involve trade-offs between conflicting goals.
- Attempts to address the problem can lead to unforeseen consequences, some of which may be deleterious.
- The problem is not stable. Policy makers need to focus on a moving target, since the problem continues to be evolving.
- There is no clear solution. Solutions are not verifiably right or wrong but rather better or worse or good enough.
- It is socially complex. The social complexity overwhelms most current problem solving and project management approaches. They require coordinated action by a range of stakeholders.
- It is a problem that does not sit conveniently within the responsibility of any one organization, but requires action at many levels of society.
- It requires changing behavior, requiring the commitment of individual citizens, especially for sustained behavioral change.
- It is characterized by sustained policy failure, seemingly intractable to decades of policy action.

Adapted from *http://www.apsc.gov.au/publications-and-media/archive/publications-archive/tackling-wicked-problems*

Acknowledgment

In the fall of 2017, twenty-four women and men, many strangers to one another, gathered together for two and a half days to reflect and dialogue together on the impossible. During their conversations, they were asked to "remember their humanity and forget the rest."

We would like to acknowledge these individuals for their generosity of spirit, their many insights and learnings, and their bravery.

"The Climate Change issue, what we are confronting, is impossible. On the other hand, throughout history the most interesting changes occur in those moments when people decide to do the impossible. And that's what we need to do now."

—Thinkers Retreat