

AJ

THE VOICE OF CANADA'S
ENVIRONMENTAL
COMMUNITY

In The Green

Impact investing gains momentum

Investor Revolution

Equity crowdfunding changing the game

Moonshot Investments

Motivating capital to meet the UN SDGs



INVEST IN CHANGE

**Top-down investment and
bottom-up change:
Is this the recipe
for a renewed and
sustainable economy?**



**GREEN COVID RECOVERY
e-NGOs AND THE PANDEMIC
JANE GOODALL**

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Powering *PROGRESS*

A/J's smallchangefund story

Here's the story....

A/J is a small but mighty environmental media charity founded with a mission to use **storytelling to enhance environmental education** for the betterment of all Canadians.

Our upcoming 50th anniversary...

A/J was founded in 1971, the same year as Greenpeace and Environment Canada. We're dedicated to **sharing ideas and inspiration** that can power our country's progress to a greener future.

The needs and challenges of fundraising today...

Funding the dreams of environmental action-takers has always been a challenge. But today's upside-down world has **choked off traditional channels** of fundraising such as events.

How to power our PROGRESS issue...

Developing an issue of a magazine takes resources, especially for **empowering employment for writers, editors and creators**. We needed a better path to connect and collaborate.

So we partnered with our friends at



"The Small Change Fund provides a platform to promote ideas that may not get any attention otherwise. It also gives credibility and accountability to your campaign."

Kirsten Earl McCorrister
Lake Winnipeg Foundation

Expert advice....

"Much more than a platform, this is about people whose experience, knowledge, and **connections make campaigns soar**. Use the power of storytelling to engage a wide audience of supporters."

Here's what we have so far...



We're storytellers and we've got a great story to tell about the **power of our collective communities** - and the work that goes into **powering progress**.

Follow along with our story....

www.smallchangefund.ca/project/AJsPROGRESSissue/



THE VOICE OF CANADA'S
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COVER Front and back cover image by Jelena Polimac. Jelena was inspired to create this illustration of 'Investing in Change' with the idea of communities lifting each other up from both the top down and the bottom up.



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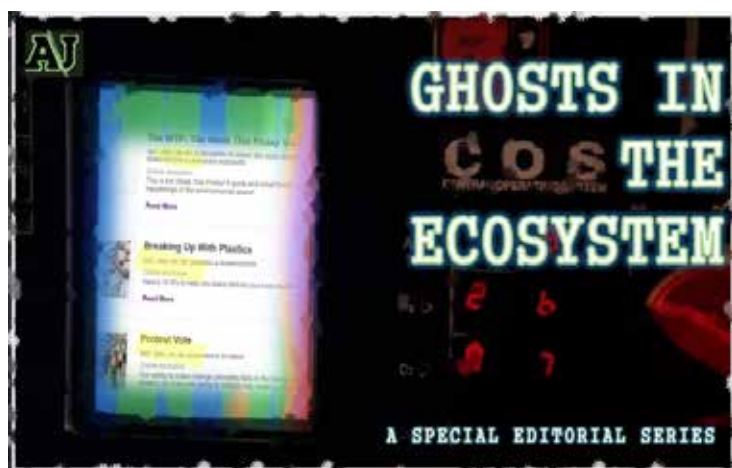
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GHOSTS?



The glitch in our website, which time-stamps all articles with the date December 1969, inspired the idea of "The ghost in the ecosystem" of environmental communication. Looking towards our upcoming 50th anniversary in 2021, this series explores AJ's past and its ties to the future.

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Then There's THIS



WTF

The week this Friday is AJ's weekly series compiling 5 quick and smart briefs about happenings in the environmental space.



Into the Woods

Forest schools and outdoor learning could be the key to rebuilding our education systems in a post-covid world.



Too Hot to Handle

What happens in the Arctic tends not to stay there. The effects of heat waves in Siberia are having a global ripple effect.



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Good Investing

Our goal is to help **1,000,000** Canadians invest intentionally.

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We are independent investment coaches. We don't sell any products or take any commissions. Instead, we educate and empower our clients to feel confident investing their own money according to their values. If you decide to work with us, here's what you can expect:

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- **Pick investments in line with your values**
- **Create an investment plan**
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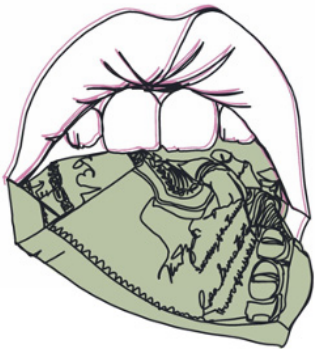
Socially Responsible Investing



Fossil Fuel Divestment



Green Technologies



money talks.

whose voice is more
resounding than the earth?

a despot
smiling,
through green paper teeth
that weigh more than the
tree that fathered them
soothsaying the fortune of
man
through enslavement of
the third planet

and man listens intently,
for money speaks louder
than worlds.



progress.

progress;
this is
the only way
forward.
with feckless abandon
man moves
to create and destroy
for sake of luxury.

we do as we please.

for sake of luxury
to create and destroy,
man moves
with feckless abandon
forward:
the only way.

this is
progress.

The Tidal Wave Has Arrived



I was swimming against the tide when I started my first business focused on sustainable investing in the wake of the 2008-09 market meltdown. Few people had ever heard of the concept, and those who knew about it assumed that investors had to sacrifice financial returns to align their portfolio with their values.

Now, it feels like I am riding a wave of momentum with tremendous growth in both demand for and supply of sustainable investment products. Huge institutional investors like the Canadian Pension Plan, Ontario Teachers' Pension Plan, and even the Alberta Investment Management Corporation are using Environmental, Social, and Governance (ESG) criteria when making investment decisions. I would argue they are not going far enough, but it's encouraging to see them taking steps in the right direction.

Despite these advances, financial literacy is still quite poor among Canadians, and there is a big gap in knowledge when it comes to sustainable investing. The Responsible Investment Association's 2019 Investor Opinion Survey found that 72% of respondents expressed interest in responsible investments, but only 28% of respondents aged 35 to 54 reported knowing a fair bit or a lot about them. Sadly, traditional investment firms are not doing enough to educate Canadians about these options, with only 23% of respondents having been asked if they are interested in responsible investment options.

There is a real need to address this knowledge gap, which is why I am so excited that Alternatives Journal has created this very special issue. Inside, you'll read about how sustainable initiatives are transforming the investment space. Change is happening from both the top down and the bottom up. At the top-down level, Jennie Rose outlines the case for aligning investments with the UN Sustainable Development Goals, and Truzaar Dordi overviews divestment in Canadian institutions. From the bottom up, the issue explores the social finance journey of 10 Carden Street (10C) co-working space and looks at how innovative companies like CoPower and FrontFundr help connect investors with sustainable opportunities through green bonds and equity crowdfunding.

Whether it's through divesting and 'doing less evil', or impact investing and 'doing more good', people from all walks of life are investing in change. There is an abundance of opportunities across the sustainability spectrum for people who want to meet their financial goals while simultaneously building a more sustainable economy. I am hoping that this issue will inspire readers and spark conversations with financial advisors and investment managers from coast to coast to coast, adding to the tidal wave of momentum that is bringing sustainable investing into the mainstream. **AJ**

I'm hoping that readers will do more than just read about these options. I'm hoping that it'll spark conversations with financial advisors and investment managers from coast to coast to coast, adding to the tidal wave of momentum that is taking sustainable investing mainstream.

Tim Nash
Founder, Good Investing

Tim Nash is the founder of Good Investing, find his Sustainable Investing Primer on page 15.

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AJ is an independent, refereed journal.

The mandate of this journal is:

- to provide critical and informed analysis of environmental issues;
- to promote an understanding of "environment" in the broadest sense of the word, including social and political dimensions of environments;
- to reflect a Canadian perspective informed by an understanding of global issues;
- to stimulate dialogue and exchange of information among environmental activists, academics and professionals; and
- to create a publishing opportunity for Canadian scholars and professionals.

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This journal has an inclusive language policy. All manuscripts, with the exception of poetry, will be edited to eliminate sexist terminology. In quotes, sexist language is removed and replaced by alternative terms in square brackets.

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AJ CREATORS



Tim Nash is the founder of Good Investing and blogs as The Sustainable Economist. As an expert on socially responsible investing, impact investing, and the green economy, he is regularly featured in publications such as CBC's The National, BNN Bloomberg's Market Call, and the Globe and Mail. He earned his BA in Economics from Dalhousie University (Canada) and his Master's in Strategic Leadership towards Sustainability from the Blekinge Institute of Technology (Sweden). He is the lead researcher for Ethical Market's Green Transition Scoreboard® research report, which details more than \$10.3 trillion of private investments in the global green economy.

What are you currently invested in?

I own a mix of ETF-s that follow my original 'fossil fuel free' model portfolio, in addition to a solar bond from SolarShare and a community bond from the Centre for Social Innovation.

How have you been investing your time and energy lately?

I'm spreading awareness of sustainable investing by creating YouTube live shows and building an online course to reach a broader audience.



Jelena Polimac is an artist and graphic designer based in Kitchener. As a new citizen of Canada, she likes to explore and discover Canada's beautiful natural landscapes. She loves meeting new people from different countries. She believes in the importance of spiritual awakening and connecting with nature and each other.

How have you been investing your time and energy lately?

I have been investing my time in thinking about the "Invest in Change" issue and how to translate these ideas into visuals!

What are you currently invested in?

I am investing in my spiritual awakening every day, because I believe that change must start from me! From each and every one of us!



The editorial teams who made this issue possible

AJ has been invested in this issue for quite a while. 45:1 Invest in Change has been through many permutations and has benefited from the hard work of several different editorial teams. We are so grateful to all of those who had a hand in creating this issue in its various shapes and forms along the way! Their hard work and patience has paid off and we are so excited to bring forth this issue at last.

What are you currently invested in?

-I am invested in learning about and practicing intersectional environmentalism! - Mimi Shaftoe

-I'm invested in promoting environmental education with an aim to influence the public in their decision-making and their daily activities to help promote a sustainable planet.-Shanella Ramkissoon

How have you been investing your time and energy lately?

-I'm currently investing my time in learning all about electric vehicles!-Alexandra Scaman

-I'm currently investing my time into cooking and taking the time to make sure my diet is healthy for both the planet and me! -Alexander Goddard

-I have currently investing my time into spending more time connecting. Connecting with the outdoors, with my inner self, with new people virtually, and with my family - Greta Vaivadaite

-This summer I've been investing my time and energy into gardening, family and health. I am trying to eat more plant based foods, and to grow some of that food myself. Building a relationship with my garden and sharing the produce with friends and family has been rewarding. -Leah Gerber

-I'm invested in seeing socio-economic development spread across the globe! -Theo Ossinga

UPCOMING EVENTS

*Building a stronger
Environmental community*



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Communications Training Webinars with SRC: Brand Strategy & Design + Strategic Communications Planning

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Time To Be Bold

The Impact of Covid-19 on e-NGOs and the way forward

People across the world are being impacted by the COVID-19 pandemic and unfortunately, the e-NGO sector is no exception. The Sustainability Network along with Environmental Funders Canada took it upon themselves to conduct a flash survey to understand the upcoming needs and risks of fellow e-NGOs. They surveyed almost 250 organizations two months after the pandemic struck and focused on understanding demographics, operations, financial impact, emergency funds and emerging opportunities for the sector. Paul Bubelis is the executive director for the Sustainability Network.

A/J: The report highlights the uncertainty and difficulty e-NGOs are having with regard to qualification for government emergency funds like CEWS and CEBA. What do you think are the key changes necessary for e-NGOs to be able to access these funds more easily?

Bubelis: Those [difficulties] were actually a little bit of a surprise. The Sustainability Network communicates with thousands of people within the e-NGO community - and we ourselves accessed both those supports. It was a calculation done by our bookkeeper, so it was surprising that something like a third to **40% of people and groups may have thought they didn't qualify, were unsure, or had not even looked into it.** Looking back, showing the decrease in revenue to qualify for the subsidy was challenging for some organizations as they struggled with 'self-screening' due to not having staff available to make their calculations. Another issue was that other organizations had Boards of Directors that were not comfortable taking a loan (CEBA). This problem was very self-straining because even though the loans were only ¾ repayable as not everyone or every Board was comfortable taking on that

sort of liability. To their credit though, the Canadian government did set up a 1-800 helpline and so I am sure that they have heard these remarks from other organizations and individuals as well.

A/J: Fundraising efforts, corporate donations, and grants are also a major part of e-NGO funding strategies. How can individuals and big funders help this sector navigate the COVID-19 crisis?


Bubelis: The key takeaway is that right now, in some ways, it is a little bit too early to tell. Unlike restaurants, e-NGOs are grant dependant, meaning that most of them are not worried just yet. They will most likely become worried around fall 2020 or early 2021 when grant season comes to an end. Individuals can help combat these challenges by providing unrestricted donations, as opposed to project donations. **Unrestricted donations are significantly more useful** because they are far more flexible and can be used by the organization as they see fit. Many survey respondents are asking funding for more flexibility around deliverables and timelines as well as deferrals in order to use money to pay for things that require immediate action. Lastly, respondents noted that operating grants would be very useful right now as opposed to the more traditional project-based grant.

A/J: Tell me about the opportunities within the COVID crisis?

Bubelis: We chose to finish the survey with an opportunity-framed question because most of what we were asking [organizations] to tell us about was sobering and full of uncertainty. Most respondents agree that any 'normal' strategy plans are probably out the window, so right now is a great time to stop, take a breath and check how your plan works within a post COVID world. The financial crisis of 2008-09 drove lots of collaboration and this time

could be used for e-NGOs to reflect on partnerships, collaborations, and even mergers to benefit from economies of scale. One positive is that everyone has been cooped up for so long and really want to get outside. This provides 'opportunity' for those that own land trust and those who want to engage on the programming side of creating positive change within a community.

A/J: The Sustainability Network has been working with e-NGOs to strengthen this sector for a long time. What do you think will be the most significant outcomes of the COVID crisis for the e-NGO sector?

Bubelis: The outcomes needed to ensure that the e-NGO sector moves forward after COVID -19 are beyond just hunkering down and waiting for it to blow over. **When there's a crisis, it's a time to be bold and not a time to hide.** The e-NGOs must get involved in the Federal government's response to survive throughout the medium - long term. As a community, we must make sure that it is a just recovery, e-NGOs have lots of advice and vision to offer. Lastly, this is an opportunity for many organizations to take some risks and be part of an active solution. 

Sara Neiman previously studied Urban Development at Western University before pursuing Business studies at the Ivey Business School . She is passionate about the environment as well as children's health and hopes to have an impact on the Non-Profit community.

Mimi Shaftoe is in her fourth year of Conflict studies at the University of Ottawa. She's passionate about climate and environmental justice, and loves exploring new places.

SMALL BUT MIGHTY



A smiling group from the small change fund's Indigenous Youth Partnership Program

Burkard Mausberg was born and raised in Germany. He grew up throughout the rise of the Green party movement in Germany and was always disappointed that, due to pollution, he couldn't play in the creek near his small-town home. After moving to Canada, he studied chemistry and environmental studies before landing his first non-profit job in 1988. "I got hooked. The opportunity to accept change, to think freely and to be in an environment where you can be as creative and as aggressive as possible to make change was really thrilling" he says. Rising through the career pathway and after attaining Executive Director positions elsewhere, he went on to become the founding CEO of the Friends of the Greenbelt foundation and created the Greenbelt Fund. While CEO, he made it a mission to meaningfully engage with youth and to foster their interest in the environmental sector. Now, he is with the Small Change Fund, Canada's only non-profit crowdsourcing website – and he is thrilled to be dedicating each day to helping communities reach their full potential.

A/J: What exactly inspired you to start your Journey with the Small Change Fund.

Mausberg: I took over as a volunteer CEO in September of 2018, so almost two years ago and what attracted me to the proposition was twofold. Number one, [was] its ability to do work across silos. This wasn't just about environment. We have mostly environmental campaigns and partners, but it was also about Indigenous and

trying to think through how we can help Indigenous communities across the country. It's also about reducing poverty and understanding that environmental progression and improvement cannot occur without really thinking about the economic distribution among society. The second one, for me having worked in the sector for 32 years exclusively for charities and non-profits, was that I really saw the Small Change Fund as an opportunity to help my colleagues in that sector. It allowed me to sort of express a desire for capacity-building and support.

A/J: In your experience, what makes for a successful fundraising campaign?

Mausberg: Ultimately, fundraising is storytelling, so how do you tell a compelling story? At one point, the compelling story was the one of threats but over time that [strategy] is not working anymore, especially in the younger generation. So, a compelling message is number one, historically, there's an evolution. The second piece is knowing your audience. Who are you going to ask? [There's] really a broad spectrum in fundraising. There are individual donors, corporate donors, philanthropy, and the government and you must have different messaging for them all. Number three, try to be particular about showing impact. What is going to make the difference and what are you actually trying to accomplish? It's not always the same and really varies for different projects. For example, tree planting and changing public opinion through a magazine are going to have very different impacts. The

How Burkard Mausberg and the Small Change Fund are helping communities reach their full potential

last thing is not so much what makes a great campaign but what makes them successful and that is to be persistent.

A/J: How do you see non-profits as a whole evolving after COVID-19?

Mausberg: I mean, predicting the future is always a fool's errand, but there's a couple of things that are coming together. On one hand there's the pandemic and actually living, perhaps a little bit more like we ought to be living. Less driving, more togetherness, less consuming. Throughout the pandemic there is perhaps an understanding that we actually don't need that much stuff, we are understanding the racialized and equality issues, and understanding of the role of government. The government has to do economic recovery and we must see them as helpful, not intrusive. What's going to be interesting for the e-NGOs, is what that economic recovery will look like and is it going to be shovel worthy? Are we going to invest in natural infrastructure, rather than gray infrastructure? and are we going to put significant money into that? I think that's what the follow up will be, federally, a green economic recovery package but I am not exactly sure what that looks like just yet. **AN**

Sara Neiman previously studied Urban Development at Western University before pursuing Business studies at the Ivey Business School. She is passionate about the environment as well as children's health and hopes to have an impact on the Non-Profit community.

Deep Sea Discovery

A first of its kind deep-sea soft coral garden was discovered in Greenlandic waters using an innovative low-cost deep-sea video camera, built and deployed by the research team. The device was constructed with a Go-Pro video camera in a pressure resistant container, lights, and lasers built around a steel frame. This is an innovative piece of research equipment because it is low-cost and is able to withstand the atmospheric pressure required to reach deep-sea level. The coral garden surveyed exists in near total darkness, 500m below the surface at a pressure 50 times greater than sea-level and supports a wide range of marine life. This discovery is hugely significant because so little is known about the workings and relationships of Greenland's deep-sea habitats. The results raise serious concerns about the management of the deep-sea trawl fisheries adjacent to the garden, which are vital to the economy of the region. The authors hope their findings will urge policymakers to establish the area as protected under United Nations guidelines.

LEAH GERBER

Metamorphosis

Q&A

Nova Ami and Velcrow Ripper are the co-directors of *Metamorphosis*, a film looking at the emotional aspects of climate change. Ami and Ripper spoke with A/J's former editor Leah Gerber. This interview has been edited for clarity and length.

A/J: How did this film come about?

Nova Ami: In 2013, Typhoon Haiyan occurred in the Philippines and killed over 6,000 people. It really weighed heavily on our minds. My family is Filipino, and we would talk about how an event like that could change a person. That led to conversations about how humanity is changing because of this crisis that we're creating. We started talking about how we deal with change and how we resist change, how we adapt to change and how we move through change.

A/J: Did this concept shift as you created the film?

Velcrow Ripper: Of course it morphed, because with a documentary, it's really about having the questions, not the answers. We set out on a journey of discovery. It's like being an explorer. You set out, and you don't really know what you're going to find. From the very

beginning we wanted to explore the psychological and emotional aspects of climate change.

A/J: That's a really under-discussed topic in the media.

Ripper: We didn't really want to do "Climate Change 101." We wanted to address other issues that I think are becoming bigger in our lives. In fact, the emotional and psychological implications of climate change actually affect our ability to implement solutions. If we are going into climate denial because we're afraid to actually face it, or we're dealing with psychic numbing, we're not going to turn this around. These aren't abstract, philosophical questions. The problem with ignoring or not dealing with the grief is that it won't go away.

A/J: There's so much heartbreak in the film. How did you handle your own emotions around this? As filmmakers, how did you protect yourselves?

Ami: The problem with ignoring or not dealing with the grief is that it won't go away. We felt like we had a mission with this film. We had a baby at the same time that this film was conceived, and so our son was with us all the time. That really brought us into the present and raised questions for us on a daily basis about what our roles were as filmmakers and as parents in terms of how to



protect him and prepare him for what's ahead. I think having him there was a reminder of what our mission was.

AJ: What kind of reactions have you had to the film so far?

Ami: A common response we get during our Q & A's is that, while watching the film, people don't feel like they're being judged or lectured to, or having a finger pointed at them. It was our intention to offer this film as more of a poem, a kind of meditation.




AJ: Even in the parts of the film that are hopeful and uplifting, there's no joyous chorus to signal or direct the viewer's emotions. Can you talk more about that?

Ripper: I was the sound designer on the film, and I worked with a wonderful composer, James Mark Stewart, and we actually brought him in to do music that was closer to sound design than music. The soundscape was like a landscape. It was very layered, and we tried to make

the music not come across as music. Like the visual side of the film, it was edited to be a poem to allow room for engagement. Some people told us they even stopped listening to the words sometimes and just got into the visuals, and that's okay with us.

AJ: What should people take away about 'Metamorphosis'?

Ami: This is a climate change film unlike any other climate change film we've seen. It's meant to be experienced in a theater, visually and sonically. It moves beyond the crisis phase into solutions that aren't meant to be the solutions to our problems, but are meant to spark the imagination. Hope is a choice, as Velcrow mentioned, and how we respond to this crisis is our choice.

Ripper: Go to this film for a cinematic, poetic experience that can perhaps help you understand some of the psychological or emotional implications of climate change. It can also help you fall in love with the planet again. 

Leah Gerber has always been pretty nosy. Sometimes she still has trouble distinguishing between being curious and being rude. She loves exploring Canada's nooks and crannies, especially on a bicycle. Her goal is to tell stories, visually and with words, that inspire change in our world, even just a little.

Seaweed Solutions

Sargassum seaweed is taking over beaches in the Caribbean and Mexico, bringing with it negative impacts to the tourist sector as well smothering coastal reefs and fragile seagrass habitats. This rise in seaweed in the region is due to increasing ocean temperatures and fertiliser runoff from agriculture creating favourable conditions for the seaweed to bloom. Researchers at The University of Exeter and Plymouth Marine Laboratory are working on a cheap solution known as fractionation which subjects the seaweed to high temperatures and pressures to break it, as well as any other material (even plastic) down using hydrothermal liquefaction (HTL). After this process it may then be converted to fertilizer, bio-oils and other useful products removing it from the beaches and coastal areas.

Climate and Armed Conflict

Climate change is not only impacting human health through increased pollutants in the air, but also may be doing so by increasing conflicts around the world. Earth's Future, a group of scholars with diverse environmental and political backgrounds analyze these relationships between climate and organized armed conflict. A previous report in 2019 found that over the last century between 3–20 percent of organized armed conflict risk has been influenced by climate. According to a new report by the same authors, priorities for future directions of research include "deepening insight into climate–conflict linkages and the conditions under which they manifest, ambitiously integrating research designs, systematically exploring future risks and response options, and evaluating the effectiveness of interventions to manage climate–conflict links".

A Sustainable Investment Primer



Q&A with Tim Nash, the Sustainable Economist

Investing can be a daunting topic for many people, so AJ's Adam Morgan sat down with the guest editor of Invest in Change, Tim Nash, to cover some of the basics of sustainable investing.

Q: You often say “The green economy is here, and it’s bigger than anyone realizes”. What does this mean for the average Canadian?

Tim:

Often when we talk about the green economy, we talk about it as if it’s some sort of futuristic scenario. When we imagine what a green economy looks like, it’s like the Jetsons, or something. So we have this idea that it isn’t here yet. But I am here to tell you otherwise. I do a research project called the green transition scoreboard, with a mentor of mine, Hazel Henderson. And for the last 10 years, we’ve been tracking private investments in the global green economy. We take a great strain to exclude things like clean coal, or even biofuels because of the whole food versus fuel debate. We’re quite strict about what we count as green. And we exclude government investments whenever possible, because about 10 years ago, one of the big knocks on the green economy was that it supposedly only existed due to government

subsidies. So we actually account for that and remove government investments.

And what we found through this project is that since 2007, there’ve been more than \$10 trillion of private investment in green sectors. This is massive. It’s bigger than anyone realizes. So what I’m here to tell people is that the green economy is here. It’s here today, and it’s only going to get bigger. For Canadians, what this means is that our economy is under transition. Especially because historically, a big percentage of the Canadian economy has been based on raw materials, things like forestry, mining and extraction of fossil fuels. As we look forward and work to understand the risks associated with climate change, we need to move away from fossil fuels. If we’re serious about meeting our climate change targets, this transition is only going to accelerate and is probably going to happen even faster than people realize.

So when I say the green economy is bigger than people realize. It’s about understanding that this isn’t some sort of futuristic scenario. The green economy is already here, and it’s not going away anytime soon. We’ve got to keep in

mind that we’ve accumulated these \$10 trillion of green investments in the era of Donald Trump, and back in the era of Stephen Harper. Even with a lot of global leaders that certainly dismiss climate risks if they don’t outright deny them, even in that sort of unfavorable political climate, the green economy has kept growing. So at this point, as far as I’m concerned, nothing’s going to stop it. Really the question is, how quickly is it going to grow? And for us as Canadians, the question is, how can we participate and benefit and invest in this emerging green economy?

Q: How did you first get involved in sustainable investing?

Tim:

I grew up with my father in the investment industry, so I always had a good brain for stocks and bonds and investments. But how I got into sustainable investing is kind of a funny story. Early on in my university career, I traveled to New Zealand on exchange and I took a course in triple bottom line economics, and it was a game-changer. When I graduated with my BA in economics, it was with way

List of Invest in Change Terms
 Socially Responsible Investing (SRI)
 Impact investing
 Environmental, social, governance
 analysis (ESG)
 Accredited Investor
 Mutual fund
 Exchange Traded Fund
 Stranded Assets
 Community Bonds
 Green Bonds
 Equity Investment Model
 Venture Capital

more questions than I had answers. So I decided to go to Sweden to do a masters in sustainability. And that's where I really started to understand the business case for sustainability. I started to dive into these different areas like ESG analysis, looking at environmental, social and governance criteria for companies, and impact investing.

I graduated with my masters in sustainability in July of 2008 and graduated straight into the economic crash. I struggled for the first few years. At that point, I was teaching economics at Sheridan College. It wasn't my dream job, but there weren't many jobs available. Teaching gave me a bit of flexibility, so I worked to create my own business and my blog, sustainable economist, and I started writing about some of these issues. It was very slow, but eventually people started reaching out saying, Tim, how do I do this? Can I get some help? It took several more years, until there was enough demand. And about two years ago, I took a leap of faith and I quit my teaching job. I created my new company, good investing, and hung up my shingle as a financial planner and started working full time to help people figure this stuff out.

Q: There are many terms and concepts within the field of sustainable investment, and it can be hard to differentiate between them. People in this sphere are increasingly talking

about impact investing and socially responsible investing. Can you explain the difference?

Tim:

The terminology in the sustainable investment space is not always consistent. So I'm happy to share with you my approach, but know that as you do talk to different people you might hear different terms used interchangeably. For me sustainable investing is a very broad umbrella term. And then within that I differentiate between socially responsible investing and impact investing. Socially responsible investing can be thought of as doing less evil, meaning that if you're still going to invest in large, publicly traded companies, you're going to get rid of all the nasty ones, and everyone has a different idea of what those nasty companies are.

Then the other area is what we're calling impact investing. And this is what I often refer to as doing more good. Even beyond investing in you know, there are stocks, you can invest in green stocks, like renewable energy or clean technology. Usually, when we talk about impact investing, we're talking about private investments. These are often going to be debt or loans or bonds, right. Sometimes it can be equity stuff, but most of the options are on the debt side of the equation. And it's going to be things like green bonds, and community bonds and micro finance. When it comes to impact investments, we are making direct investments in organizations that

are having that positive impact, rather than doing it through the market, which is sort of like an intermediary.

Q: What advice would you give to people who would like to start investing sustainably?

Tim:

There are lots of options available, which is great. I love choice, but this can be a little bit confusing for the average investor looking to start investing sustainably. Where I have my expertise is with this segment called ETFs, exchange traded funds. There are mutual funds that are available if people want to go with mutual funds. There are some wonderful, socially responsible and green mutual funds available in Canada. However, with mutual funds, the fees are a little bit higher, which is why I tend to prefer ETFs. These are like mutual funds. It's a bundle of companies, except it's traded on the exchange. The fees tend to be a little bit lower. And there are dozens, if not hundreds of different mutual funds and ETFs that are available to Canadian investors, but most of them are going to have a fairly loose definition of socially responsible investment. They might just get rid of what are often called the "sin stocks", things like alcohol and tobacco and gambling, because the socially responsible investment movement was started in Canada by the Mennonite community. But now we're starting to



PHOTO BY GETTY IMAGES



see a lot of movement towards looking at fossil fuels with a negative screen, and using what is called ESG analysis.

ESG stands for environmental, social and governance analysis. So this means ranking companies, and giving them an ESG or sustainability score. A lot of funds will decide to exclude companies based on these ESG scores. So most of the funds are going to take a very loose definition, right? They might have a very lenient ESG criteria selection. Whereas further down the rabbit hole, you're going to get funds that are much more stringent, and exclude fossil fuels and other polluting sectors. And these ones would tend to have much more stringent ESG criteria, where instead of getting rid of the worst of the worst, they might simply select the best of the best companies with the highest ESG scores.

It's really important that investors don't just read the marketing brochure, because there can be lots of greenwashing in this space. Investors need to understand the methodology of the fund, what are those exclusions? How does the fund define their ESG criteria? And then you've also got to take a close look at the companies that are

inside the fund. Because every so often there might be a company that sort of squeaks through a loose methodology that an investor might really want to avoid, so it's important to do your research.

Q: What about accessibility? Do you need a lot of money to invest sustainably?

Tim:

Not at all! Anyone can get started with sustainable investing, but it's important to keep a few things in mind. When it comes to impact investments, there are minimum investment requirements. The lowest I've ever seen is about \$500. Commonly will see minimum investments of \$1,000 or \$5,000 or \$10,000. Now the tricky part here is that when it comes to these impact investments, your money is often locked in. So this has to be money that you are prepared to lock away for three years or five years or sometimes even longer. So we usually don't want to do these impact investments as your first step. Usually, we want that to be part of a larger

portfolio. Oftentimes, when people are getting started, it's going to be in the realm of socially responsible investing.

When you're looking at your socially responsible options, some of them are going to be more sustainable than others. Some of them will be fossil fuel free, some of them will still include fossil fuels. We'll just get rid of the worst of the worst companies as a first step, and you can figure out your own ESG criteria and try and find companies or ETFs that align with it. Robo advisors like wealth simple, quest wealth or modern advisor are places where people often get started. I think the minimums are almost non-existent. You can open up a tax free savings account and invest with a robo advisor in a way that is socially responsible even if it's just a few hundred dollars. Now in terms of accessibility, investors with small amounts of money are limited in terms of their options. As you have more money, the options start to increase. So certainly as your portfolio gets bigger, your pie chart gets bigger, it makes a lot more sense to incorporate these impact investments that, you know, maybe do have minimum investments of \$10,000.

But you might only want that as 5% of your portfolio, right? So you should really have about 200 K, if that's your game plan.

Now there's another important aspect here, which affects accessibility, which is accredited investors. They're the ones that really have complete free range, they've got the most options available. To become an accredited investor you've got to satisfy certain criteria like net worth, income and asset size. And that's where we can start looking at things like venture capital in the clean tech space. And that's where you can really look at some of these higher impact but also higher risk investment opportunities. Those aren't going to be accessible to most Canadians. It's that those are only going to be available to accredited investors.

So really, my main point here is anyone can get started, you know, for as little as about \$1,000, you can get started with socially responsible and impact investing. But as you have more money and more dollars to invest, your options tend to increase. And this is where some of the things we look at in this issue come in, like equity crowdfunding, which try to make the venture capital stage more accessible.

Q: So what about the risks? Can you tell us more about that?

Tim:

There's always going to be risk when it comes to investing whether it's sustainable or unsustainable, right. There's always always the risk of these things. I always caution investors, you know, diversification is the name of the game. So obviously, you don't want to put all of your eggs in one basket, even if it's a green basket. I've seen a lot of investors get nailed by investing in one specific company or one specific technology, right? And if that doesn't pan out, then they end up losing a lot of money. So you know, when it comes to this, it's about understanding that one of the worst things people can do is nothing, right? And then if they are going to take action, and they are going to invest in a sustainable manner, they

still need to be careful about those investments and make sure that they are properly diversified.

But really, the risk in my mind is maintaining the status quo and not changing fast enough. Recently, the Bank of Canada came out with a statement saying that climate change is one of the largest vulnerabilities of the Canadian economy. And this was not a huge surprise to me because our economy is so fossil fuel dependent. What was a surprise is that the Bank of Canada is now realizing it. And they talked about the two main risks being physical risks from things like forest fires, and flooding, and you know, droughts and heat waves and all those sort of natural disasters, and then also about the transition risks. This is the idea of stranded assets, or the carbon bubble, which basically means that if we, as a society decide that we're going to meet these climate change agreement goals, we're going to have to leave a lot of those fossil fuels underground. And since Canadian companies and therefore Canadian investors have such high exposure to this carbon risk, really, there is a big concern that that these companies and these banks and these investors are not prepared that they're going to be left holding the bag as these assets become stranded and are going to lose a huge amount of money in the process.

Q: What does the future hold for sustainable investing?

There's a very popular quote out there that says that the only people believe that infinite growth is possible on a finite planet are mad men and economists. Right? So it's understanding that we can't grow infinitely. Now, I would challenge that a little bit. Certainly that adage is true. When it comes to when economic growth that is tied to the exploitation of people and the planet, we cannot grow infinitely. There are some very real limits to economic growth, when it is coupled with something like co2 emissions.

That said, when it comes to economic growth, we can have infinite growth in the money supply. Money is sort

of a figment of our imagination. It's a construct of our social system, which means that we can still have growth in money supply if we decouple growth in our economy, from exploitation of people and the planet. So when it comes specifically to climate change and fossil fuels, what this means is that we've got to get creative and find ways to achieve economic growth without increasing co2 emissions. In fact, the dream is to have companies that are growing while actually pulling co2 out of the air. Now under our current system, it's very unlikely that this decoupling transition is going to happen. The incentives just aren't there. It's way too profitable at the moment to simply extract things and sell them and dispose of them. So we're going to need a whole suite of policy solutions in order to achieve that decoupling. 



PHOTO BY NATTANAN KANCHANAPRAT

Adam Morgan is a journalist in residence with Alternatives Journal, and Master of Climate Change student at the University of Waterloo. He is part of the TRANSFORM project based out of UW's SPROUT lab which seeks to understand the role of small to medium size businesses in climate governance and how we can accelerate their transition to low-carbon.

In the Green

Once considered a risky move, impact investing is gaining momentum among Canadians by allowing them to align their values with their bank accounts

PHOTO BY COPOWER



CoPower provided \$2,500,000 in refinancing for a community-owned solar project in the Eastern Ontario.

For Elizabeth Bastian, the threat of climate change is not an abstract issue. She knows half a dozen people at least who lost their homes in British Columbia due to wildfires in the summer of 2018. By the end of August, a state of emergency was declared in the province; with more than 60 fires blazing, 2018 was a devastatingly record-breaking year.

Bastian, 68, is also a woman of science. As a doctor, she has spent the majority of her life investigating theories and deriving rational solutions to minimize harm and maximize impact. When she applied that same evidence-based approach to issues affecting her province's environment, it's hard for Bastian not to think BC's current state is anything but a product of the choices we make. "British Columbia has an astronomical problem with wildfires," she says, "and this is obviously tied in very strongly to climate change." A passionate environmentalist who believes in the power of small-scale change, from growing her own food to limiting her use of petroleum, Bastian is also fiscally pragmatic. And like many

in her age cohort, she's approaching retirement with an eye to being comfortable enough to enjoy life with financial peace of mind.

Yet when she first attempted to align her environmental values with her financial goals, the good doctor encountered roadblocks. Most investment advisors she spoke with acknowledged some green options existed but cautioned her that investing in them would likely lose her money. Still determined to have her money act as a force for good, Bastian began divesting her finances from anything capable of causing environmental harm, including oil, natural gas and resource extraction. Yet she soon discovered that many mutual funds projected to provide healthy returns retained connections to industries that ran contrary to her conscience.

Enter CoPower, a sustainable investment platform that allows Canadians to make investments that support clean energy projects. This, it turns out, was what Bastian had been searching for. "When I see somebody in the investment sector having the

courage to do this and seeing it be successful," she says, "I've got to be on board."

CoPower is a national leader in helping Canadians participate in (and profit from) the transition to a low-carbon economy through impact investing. The idea is simple: CoPower makes loans to clean energy projects that are expected to generate steady revenue – whether by selling clean power or by reducing energy consumption. The loans are pooled into Green Bonds which can be purchased by individual investors. As the green projects repay their loans, that money flows through to bondholders like Bastian as interest payments. Until recently, only high-net worth individuals and institutions were able to participate in private investment opportunities like this, making CoPower's reach into the general market a novel move.

Bastian isn't the only one on board. In November 2019, CoPower announced that it would be the first impact investment company to be acquired by a Canadian bank. Vancity Community Investment Bank (VCIB),

itself a subsidiary of Vancouver City Savings Credit Union (Vancity), bought the young company with the goal of scaling its impact finance business and impact investment offerings to include clean energy and energy efficiency. VCIB's work to-date has focused largely on financing for social purpose real estate, for example, affordable housing developments, not-for-profit owned real estate and co-working spaces.

The acquisition could be good news for Bastian and a growing number of individual Canadian investors like her looking to align their values with their financial goals. "With the deeper resources and expertise of a bank, we can speed up CoPower's work and get more capital flowing to low carbon projects," said VCIB CEO Jay Ann Gilfoy in a statement about the acquisition. "And with our combined expertise we can create new investment products that drive both social and environmental change and make them accessible to a wider investor base."

As Managing Director and Head of Capital for CoPower, Trish Nixon has observed first-hand the demand for investments that drive positive change from that wider audience: "Individuals across Canada are increasingly conscious of the impact of their choices as consumers. This extends to what they buy and own in their investment portfolios."

For Nixon, the crux of her job is to help investors put their money towards environmentally sustainable and financially stable projects – an act of injecting compassion into an industry typified by cold calculation. "Most of our investors come to us initially because they are seeking green investment options. They believe in clean energy and in doing their part to accelerate the low carbon transition," she says. "They stay, and choose to invest with us, because there's a viable opportunity that's good for their portfolios."

The company has sold out of its latest round of Green Bonds, and is working on preparing the next issuance, which they have announced may be delayed due to the Covid19 pandemic. CoPower's previous issuance offered

4% annual interest on a 5-year term with funds supporting a diverse array of energy projects including solar installations, geothermal heating and cooling systems and LED lighting retrofits. CoPower operates in Ontario, Manitoba, BC, Quebec, Alberta, Saskatchewan, Nova Scotia and Yukon with plans to expand to the remaining provinces and territories.

It may seem like a niche market reserved solely for environmentalists, but CoPower reports wide, almost grassroots appeal. Foundations and credit unions are welcome to invest, but roughly 65 percent of CoPower bondholders are individuals investing their own hard-earned cash as they choose, from millennials making their first foray into financial planning to boomers looking for a dependable return on their retirement savings. One 16-year-old even saved up her summer wages from Booster Juice to purchase a bond. And the projects are showing tangible environmental benefits. CoPower reports that CO2 equivalents avoided to-date from their Green Bond portfolio total 12,019,164 kg. What does this look like in the real world? \$30 million raised to support more than 1150 individual clean energy or energy efficiency projects.

"At a global level, the outlook for investment in renewable energy projects is very strong, as solar, wind




Jay Ann Gilfoy and Trish Nixon discuss VCIB's acquisition of CoPower at the MaRS Social Finance Forum.

and other renewables become much more cost competitive," says Adam Spence, CEO of the SVX, an impact investment platform originally incubated at MaRS, an urban innovation centre in Toronto. Consumers are increasingly demanding renewable energy, he said via email, as society grapples with how to mitigate the struggles arising from global warming.

As these struggles transcend borders, so too do the attempts to address them. A recent survey from the Global Impact Investing Network showed that between 2017 and 2018, impact investment assets nearly doubled to more than \$228 billion. And all projections suggest this upward momentum is only expected to continue. Meanwhile, reports abound that speak to the profitability of impact investing, including an analysis from Morgan Stanley-- a multinational investment bank-- showing that since 2016, green bonds have outperformed



Installing a ground heat exchanger for a GeoTility project in Kelowna, B.C.



their conventional counterparts, doubling issuances between 2015 and 2016 to \$81 billion.

Regardless of their positive environmental impact goals, Trish Nixon and the CoPower team are still tasked with making money for their investors. As such, each project they lend to goes through a thorough rigorous screening and due diligence process that includes investigating how the project will derive revenue, a review of the management team and an analysis of how the project moves the country towards a greener economy.

When CoPower launched in 2013, it looked to solve two long-standing problems in the impact investment and sustainable finance industries: granting retail investors access to investment options capable of delivering a decent return, and financing low-carbon infrastructure projects that often struggled to secure traditional funding. The former had to do with limited options, while the latter reflected a banking system ill suited to handle small but vital infrastructure projects.

Despite the profitability of his business, for Jim Leask, finding financing for his BC-based geothermal company was a challenge. GeoTility, the company he founded in 1995, provides heating and cooling systems that draw power directly from solar energy trapped underground, providing a zero-carbon solution up to 80 percent cheaper than traditional heating and cooling methods. Finding adequate and stable financing

was important, he says, but so too was finding lenders ethically aligned with his business mandate. The search led him to CoPower. “They’re a good cultural fit for us,” Leask says, “and they were excited about building a long-term partnership.”

CoPower’s loan helps Leask provide geothermal heating and cooling systems for an entire community in Kelowna, BC, servicing 500 homes. This represents the lifecycle of CoPower’s operations: GeoTility receives loans from a green lender, investors make a healthy return that aligns with their values and homeowners access green power at a fraction of what they might otherwise pay.

Canada’s impact investment industry is developing on an ever-changing playing field. The twin gorillas of politics and fossil fuels are largely responsible for endlessly tilting the investment landscape one way and another. At the municipal level, progress is being realized. Toronto City Council for example has set ambitious carbon reduction targets and has introduced a number of programs designed to incentivize energy efficiency retrofits and investment in low carbon infrastructure on a broad scale.

At the same time, Ontario’s Progressive Conservative government is turning back the clock on years of climate change mitigation progress. Just weeks into his four-year term Premier Doug Ford had already made substantial changes to environmental policy. The largest, by far, was his

decision to eliminate Ontario’s cap-and-trade program for carbon emissions. Instituted by his Liberal predecessor, cap-and-trade forced the province’s worst industrial polluters to buy carbon-offset credits at auction. The hundreds of millions raised since the program began in 2017 were used to fund programs that supported a shift towards a cleaner economy. One such program was GreenON, which supplemented homeowners making energy-efficient retrofits; another was a \$14,000 rebate for the purchase of electric cars. Since Ford took office, both have been axed.

Shortly after the e-vehicle subsidy wind-down was announced, electric car manufacturer Tesla sued the government, claiming they were arbitrarily singled out in the cancelling of customer rebates. The courts agreed. And in September, the government quietly acquiesced to holding public consultations on ending the cap-and-trade plan after Greenpeace and Ecojustice filed suit, claiming Ford had



breached the Environmental Bill of Rights in failing to consult with Ontarians before scrapping the program.

Ultimately, Ford's government has been tight-lipped when it concerns environmental issues. A spokesperson for Environment, Conservation and Parks Minister Rob Phillips did not address questions sent by A.J. Instead, ministerial aid Lindsay Davidson said only that, "Ontario is committed to developing a new plan to address environmental priorities, including clean air and water, conservation, lowering emissions, and reducing litter and waste."

In the absence of any clear provincial policy on curbing climate change, the federal Greenhouse Gas Pollution Pricing Act has been implemented in Ontario. All direct proceeds from the tax go into an income dividend return program, whereby revenues are funneled directly back to the jurisdiction in which they were collected, in this case to Ontarians. Green Party of Ontario MPP Mike Schreiner says he urged Ford to take this approach (and the credit),

but the government shot him down. "I made it very clear to the premier over and over again," Schreiner says: "The carbon dividend cheques could either be signed by Justin Trudeau or Doug Ford."

Despite these political shake-ups, Trish Nixon maintains that CoPower investments are diversified and structured so as not to be directly affected by these changes in policy. Yet that hasn't stopped investors from being understandably worried. Following Ford's election win, CoPower hosted a public event to allay fears of economic turmoil, bringing together industry experts with over 300 members of the public. They packed into CoPower's Toronto office, palpably concerned with how this new government would affect not only their investments but also Ontario's commitment to tackling climate change. This swift reaction from investors doesn't surprise Nixon: "Uncertainty is never good for any type of investment environment."

The current climate of economic uncertainty caused by the Covid pandemic has revived similar concerns for many investors, but in a recent statement CoPower assured clients of the safety of their investments, emphasizing that "private fixed-rate investments do not fluctuate with volatility in public markets", and reiterating that the pandemic will not affect the company's commitment to connecting clean energy developers with investors, though it may slow the process of preparing the next issuance of green bonds.

Ultimately, a longer-term vision is needed to continue the green market trends we're witnessing. "In the current

public policy environment," says Spence. "It will be important to rapidly develop new solutions that can further incentivize investment in the medium and long-term." This may include investment tax credits, direct investment incentives or other capital tools to maintain and grow local and global investment. "If we don't act," he says, "[Canada] could really harm [its] current and future market position and, more importantly, significantly impede critical progress in tackling climate change." The recent economic disruption caused by the Covid pandemic, and the investments necessary as we slowly move into the recovery phase certainly offers an important opportunity to take action and step up on this front.

Regardless of what uncertainty lies ahead, CoPower will continue to push on, working to grow its impact investment offerings as a part of VCIB while inspiring the growth of the broader industry to push against entrenched status-quo mindsets. According to Nixon, success will depend on strong partnerships and relationships, the company's recent acquisition being perhaps the strongest example. "The impact investing market is highly collaborative. As it continues to grow, it must stay that way," she says. "Our biggest competitors are not each other, but the status quo." **AV**

Miles Kenyon is a journalist and communications professional based in Toronto. He writes about human rights, free speech, LGBTQ2+ issues, and animal protection.





Moonshot Investments

Motivating capital to meet the UN's SDG strategies

On the hierarchy of products we can't live without, a coffee-delivery drone using a mechanism to dole out caffeine to tired office workers falls pretty near the bottom of anyone's list, especially compared to products helping to meet true human needs for food and clean water and air. While drone delivery is once again making headlines in the tech sector with a surge of interest in drone delivery during the Covid19 pandemic, a recent trend of business growth and investment around the broad themes of climate change, general resource efficiency, public health and social equity may go where traditional lending institutions have feared to tread. A strategy focused on building on this momentum would go some of the way towards helping the global community reach its nation-by-nation targets by 2030, a program also known as the United Nations Sustainable Development Goals.

In 2015, the United Nations hosted summits to forge plans for an ambitious and transformative global development

agenda, including the 2030 Agenda for Sustainable Development, 17 sustainable development goals aimed at abolishing poverty and hunger, and scaling up provisioning systems of clean water and sanitation. This agenda is a roadmap for how to support the planet's human population, projected to be 9.7 billion people by 2050.

This massive transformation of society requires massive funding in sustainable infrastructure. Thus **the 2030 SDGs point to the crucial role of financial partnerships, both in the public and private sector, especially in the poorest and most vulnerable countries.** According to OECD (Organization for Economic Co-operation and Development) estimates reported in 2017, USD \$3.3 to \$4.5 trillion in annual investment would be required to implement the SDGs in developing countries by 2030. These days, Official Development Assistance cash totals just US \$1.3 trillion annually, well short of its goal. But to match institutional capital

with the need for loan financing is a colossal undertaking that has yet to be achieved at scale.

Achieving the SDGs may in fact call for shifting to a different economic model, one that acknowledges a deeper understanding of equity. According to Oxford academic Kate Raworth, author of Doughnut Economics, **a good way to think of sustainability is in terms of a doughnut shaped space – one where resource use is high enough to meet people's basic needs but not so high as to transgress planetary needs.**

As we consider the benefits of an doughnut-shaped economy, the knowledge forum on the SDG agenda points to the efficacy of partnerships with loan financing, institutional capital and private sector commerce support. As a result, many have turned to impact investing, a new investment mechanism geared towards delivering on the SDGs. Going above and beyond the frameworks of socially responsible investing and sustainable investing, which involve investing according to

ethical guidelines, impact investing seeks to further business and product development focused on sustainability or other social equity goals.

In many ways, the same traditional investment incentives apply to the current version of sustainable investing. **The drive to see positive financial returns and for strong business models to scale up are as strong as ever. The difference now is that impact investors aim to produce both financial returns and positive social or environmental outcomes.** A misconception lingers, however, that the biggest risk with impact investing is sacrificing returns, the argument being that these initiatives lack the traditional incentives of profit and scale.

One problem for anyone using United Nation SDGs as a guide for investment efficacy is the question of metrics. Financial returns are easy to measure, but determining positive social impacts can be less straightforward. To tackle the difficulty of measuring positive social change, the Global Impact Investing Network developed the Impact Reporting and Investment Standards (IRIS) with metrics for investors to compare social impact returns with financial gains.

IRIS is a catalog of generally-accepted performance metrics that impact investors use to measure the social, environmental, and financial performance of their investments. IRIS metrics align with a number of assessments, standards, and reporting frameworks from a range of industries. These reporting frameworks provide guidance on what social and

environmental performance areas to measure and report to stakeholders, based on sector, business model, organization type, and/or target beneficiaries.

In “Somebody’s Gotta Get Rich”, an opinion piece in Stanford Innovation Review in August 2018, Kevin Starr, director of the Mulago Foundation and the Rainer Arnhold Fellows Foundation, writes that for businesses designed to address social need to have any measurable impact, they must be able to scale. “Impact at big scale requires that lots of businesses deliver a similar product or service over broad geography ... and barely profitable businesses won’t scale.” He adds, “The main thing social businesses need to do is to make sure they’re not stuck in a niche where scale can’t happen,” he says.

According to The Ellen Macarthur Foundation, we need “a systemic shift that builds long-term resilience and provides environmental and societal

benefits” to construct a “circular economy.” Research suggests such a transition can be aided by more capital flowing into businesses that meet one or more of the UN SDGs.

Fundamentally, an investment firm’s role is to manage risk and to find the optimal point on the risk-reward continuum. The think tank Preventable Surprises says the time has come that market analysts, fund managers and investment consultants should all raise the ante by encouraging more “forceful stewardship.”

Forceful stewardship, according to Preventable Surprises, focuses on the rights that investors have as owners. Investors now face unavoidable climate-related systemic risks to a diversified investment portfolio, and stock picking or hedging provides no way out. Investors must use their influence to urge the companies in their portfolios to take action and set responsible targets, and the UN SDGs can provide a framework for investors to use when demanding concrete action be taken.

For some time now, ESG index Funds provide exposure to companies with outstanding Environmental, Social and Governance (ESG) ratings. In the 1990s, Socially Responsible Investments (SRI) made up about 1% of the investment market, compared with 18–50% today. Nowadays, nearly every investment house offers socially responsible investments, which have grown to make up 30% of the investment market in the last 5 years.

Jake Raden, co-lead at US-based impact investing firm Swell Investing says “We find that our investors don’t

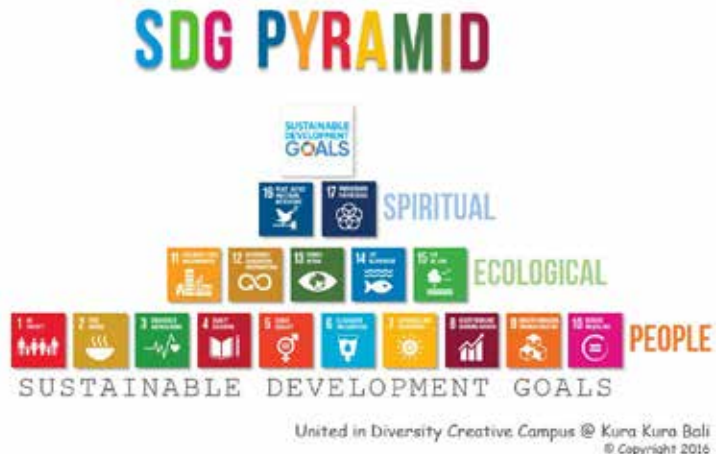
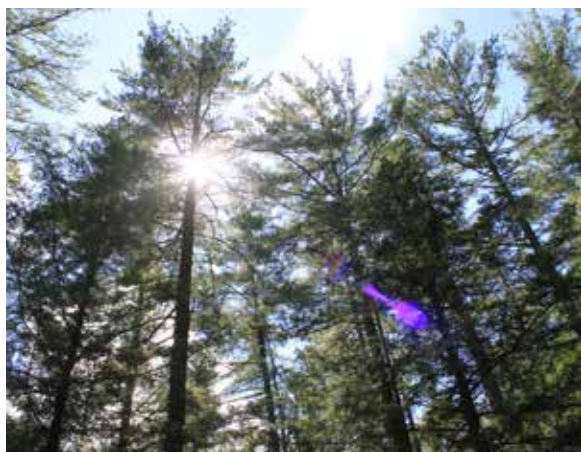


PHOTO BY STOCK PHOTOS





want to sacrifice their values in order to get a return. They're hoping that their ROI includes a world that the next generation can enjoy peacefully and comfortably." Market incentives in this type of investment align with both wealth creation and risk mitigation, a net positive risk-reward continuum.

Swell's portfolios also work towards positive impact through stocks, making it possible for the start-up to offer impact investing to a broader audience of investors with a low account minimum, or anyone hesitant to take on the risks posed by investing in a single sector. "A company's value no longer lies in raw assets--equipment, buildings, inventory," Dave Fanger, Swell Impact's founder, says. "Instead, a company's brand reputation and public goodwill dictate stock price in today's interconnected world." This is borne out by performance data, verifying that a type of "index of goodwill" is at play.

For the investor looking to support companies with positive environmental, social and governance ("ESG") characteristics, a classic, if somewhat outdated, option MSCI KLD 400 Social Index. This is a free-floating adjusted market capitalization index designed to target U.S. companies that have outstanding ESG characteristics. To be eligible for inclusion, companies must generate at least 50 percent of their annual sales from one or more of the sustainable impact categories and maintain minimum environmental, social and governance (ESG) standards.

This index excludes companies whose products have negative social or environmental impacts, that is companies involved in Nuclear Power,

Tobacco, Alcohol, Gambling, Military Weapons, Civilian Firearms, GMOs and Adult Entertainment are excluded. Out of the top 10 constituents in this index, six of these are from the info/tech sector; and include Google's parent company Alphabet, Facebook and Microsoft.

Another investment option is electronically-traded iShares MSCI Global Impact. Started in 2016, this fund

tracks an index composed of companies that derive a majority of their revenue from products and services that address SDGs.

A high ESG rating can be falsely reassuring however. The index fund, MSCI KD 400 Social Index, is a case in point; [Microsoft, Alphabet, and Facebook](#) comprise the majority of its holdings. With criticisms of its content policies, misinformation and lack of fact-checking growing since the 2016 American elections, Facebook isn't receiving high marks for its social responsibility. **A high ESG score doesn't mean the corporation supports the UN SDGs. Not by a long shot.**

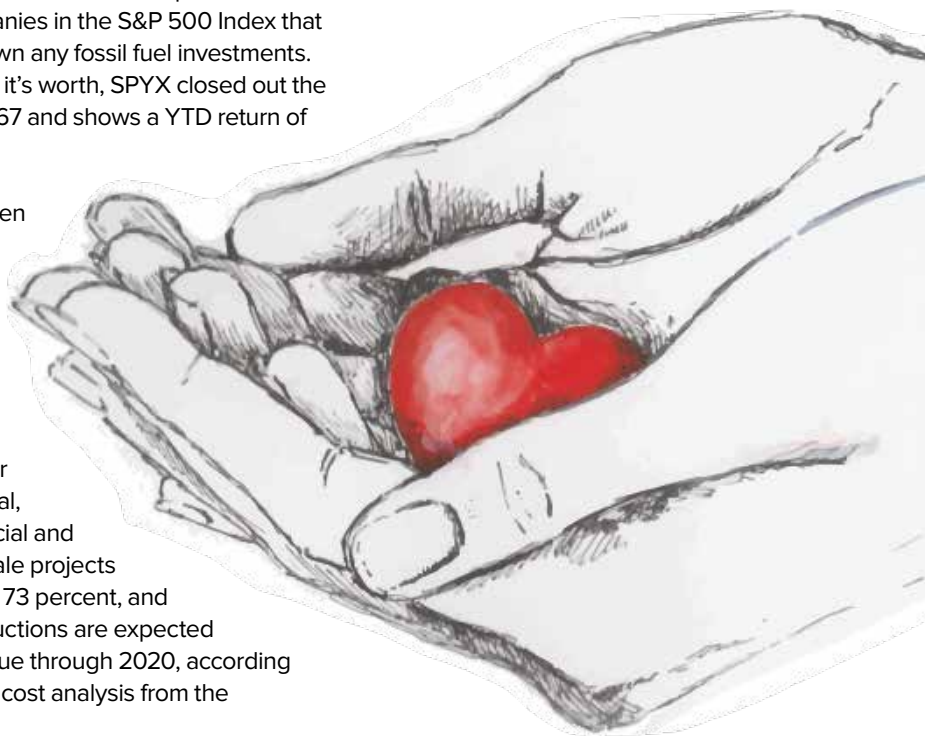
Consider a better option for supporting 2030 goals — the SPDR S&P 500 Fossil Fuel Reserves Free ETF Index Fund (SPYX). This fund is designed to measure the performance of companies in the S&P 500 Index that do not own any fossil fuel investments. For what it's worth, SPYX closed out the week at 67 and shows a YTD return of 17.96%.

Between 2010 and 2016, the average cost of solar power for residential, commercial and utility-scale projects declined 73 percent, and cost reductions are expected to continue through 2020, according to a new cost analysis from the

International Renewable Energy Agency (IRENA). Still, today solar represents less than 1% of the roughly \$4 trillion global energy market.

An industry leader in rooftop solar and energy storage is Sun Run, headquartered in San Francisco and traded on NASDAQ. Technologies to manufacture panels are now considerably more affordable, which elevates the demand, which, in turn, motivates developers to innovate technologies that meet demand at a lower cost. As prices continue to decline, and as these technologies reach scale, we can expect an acceleration of renewable power and generation.

The economics that drove down the price of renewables are also driving the development of cheaper batteries and energy storage. Better energy storage will help store power generated through solar so that it can be used during off-peak hours or sold to those who don't have access. We can also expect to see an increase in the availability and range of electric cars and aviation. Zunum Aero is a company backed by Boeing and JetBlue that has been working since 2013 on a family of 10 to 50-seat hybrid electric regional aircraft. Pro Terra based in the States is developing a fleet of electric buses. Another leader in this



area is Canadian-traded Clear Blue Technologies, which aims to provide reliable, low-cost off grid power.

The Covid19 pandemic threatens much of the progress that has been made over the past few years on the UN SDGs. UN leaders such as Secretary General Antonio Guterres and UN Environment Chief Inger Anderson have emphasized the need to lean in to this moment of crisis and “take bold steps to steer the world back on track towards the SDGs”. With the bulk of responsibility for achieving these ambitious goals resting on the back of only NGOs and governments, the challenge appears immense. But now that both private industry and finance are waking up and getting in the game, the odds are looking more promising. The possibility of meeting these goals is more than just a moonshot. **AV**

Jennie Rose covers emergent ideas in the climate crisis. She brings a decade+ of writing for the Independent Lens; Lateral Magazine; Bay City Beacon; Daily Climate; A Beautiful Perspective; Wired; MTV; Time Out Guide; Berkeley Ecology Center, and the PBS-affiliated KQED. Her style aims for brevity without sacrificing nuance and detail.



TRUZAAR DORDI

LAGGING BEHIND

Canadian institutions trail on fossil fuel divestment





The fossil fuel era may well be sputtering towards an imminent demise, but that message is muted in Canada. Amidst international action by institutional investors to distance themselves from fossil fuels, Canadian financial institutions are not only trailing but backsliding by doubling down on oil sands investments. Canada's largest investors are increasing investments in the oil sands and prioritizing short-term financial returns ahead of the country's national climate targets. In doing so, they are failing to protect Canadians from the financial risks associated with assets highly vulnerable to global shocks.

Yet the idea of divestment isn't dead north of the 49th parallel. Here, by sector, is a look at how numerous institutions are tackling (or attacking) the notion of ridding their investment stream of fossil fuels.

DIVESTMENT

What started as a fringe student movement in the early 2010s has burgeoned into the largest divestment campaign in history, eclipsing the illustrious anti-Apartheid divestment campaign it succeeded. The idea of pressuring institutions to rid themselves of climate-changing energy sources first gained a foothold with the public following author/activist Bill McKibben's seminal article "Global Warming's Terrifying New Math." In this 2012 feature, McKibben articulated that if humanity hoped to hold global warming to under 2°C the majority of existing fossil fuel reserves could not be burned. The article became one of the most widely read in Rolling Stone history, bringing the once radical message of divestment to a mainstream audience.

While early campaigns at Montreal's McGill University and Harvard faced criticism for unwarranted costs or negligible impact, the tide turned in 2014 when the Rockefeller Brothers Fund announced their commitment to divest from fossil fuels to align their financial returns with philanthropic obligations. A recent study at the University of Waterloo on prominent divestment announcements (Dordi and Weber, 2019) finds that after the Rockefeller commitment was made, these types of announcements had greater impacts and did more prolonged damage to

fossil fuel share prices, showing that large-scale commitments to divestment could legitimize the idea.

Moreover, several comparisons of portfolios invested in and divested from fossil fuels published in prominent journals have shown that fossil free investments are not only competitive but outperform traditional indices. One such study from the University of Waterloo (Hunt and Weber, 2018) on the Canadian stock index found divestment portfolios realized both higher financial returns and lower carbon footprints compared to conventional portfolios. The idea has gained traction recently with prolific funds, including New York City, the Norwegian Pension Fund and Ireland's sovereign fund declaring that divestment is a financially prudent means to align investments with climate obligations.

BANKING

If we continue to exploit Alberta's proven oil sands reserves, Canada will fail to meet its Paris Agreement commitment, contributing an additional 0.4°C to our increasingly constrained 2°C target. It's no surprise then that the oil sands are increasingly viewed as untouchable as coal. In recent years, international institutions like BNP Paribas (the largest European bank) and AXA (one of the world's largest insurance company), announced they would cease oil sands financing and insurance. Even fossil fuel companies have distanced themselves from the oil sands. In 2017, fossil fuel giants Shell, ConocoPhillips, Marathon Oil and Statoil offloaded \$23 billion in Canadian assets to focus on lower cost reserves in the United States and elsewhere. Encana's exit from the oil sands in 2019 was just the latest blow in an exodus of investment as economic and regulatory pressures mount against the industry.

As the world distances itself from Canadian oil, Canadian banks have picked up the slack in a dangerous way. Scotiabank, RBC, TD, BMO and CIBC more than doubled their investments and lending to the oil sands, pumping an additional \$30 billion into [1] [2] [TD3] the beleaguered industry between 2016 and 2017. This spending increase was driven in part by financing the repurchase of offloaded



assets by Canadian companies as well as investments in Kinder Morgan's highly controversial Trans Mountain pipeline running from Alberta to British Columbia's coast.

Canada is effectively "locked into" continued fossil fuel production by long-term investments in energy infrastructure intended to sustain production decades into the future. However, if climate targets are to be met, existing oil reserves risk devaluation and are likely to become stranded assets. In addition to the financial risks associated with asset stranding and carbon lock-in, banks also risk tarnishing their reputations in the eyes of the public and with potential investors because of their involvement in oil sands development. If our banks continue propping up the dirtiest fossil fuel out there, perhaps it's time to divest from our banks.

PENSIONS

Canada's largest public pension funds, colloquially known as the "Big Eight," are among the world's 100 largest pension funds with each managing between \$60 to \$270 billion, some two-thirds of all Canadian pension assets.

To date, only Caisse de dépôt et placement du Québec (CDPQ) has made any effort to divest from fossil fuels, by increasing investments in low-carbon

assets and reducing carbon intensity of its portfolio. Contrary to the other Canadian pension funds, the CDPQ is challenging the traditional approach to pension management and taking part in an international movement to incorporate the risks and opportunities of the climate crisis into investment decisions.

The Canada Pension Plan and Investment Board (CPIB) has long stood maintained that it seeks engage with rather than divest from the fossil fuel industry, citing in their 2017 Report on Sustainable Investing that the pension fund can more effectively press for positive change as an engaged investor and that dropping a major sector from its portfolio would not be financially prudent. Yet a 2015 report by ethical business magazine Corporate Knights found the CPIB may have lost out on more than \$7 billion since 2012 by maintaining its investments in conventional energy sources. A 2019 report by the Canadian Centre for Policy Alternatives estimates that to meet a 1.5 degree target, over three-quarters of CPIB invested reserves would be grounded and rendered worthless. By maintaining its investments in favour of engagement, the CPIB is either

betting billions on fossil fuel companies overshooting their carbon budget or risking billions in stranded assets.

The Ontario Teachers' Pension Plan also advocates for private engagement with fossil fuel companies despite considering clean energy investments on a case-by-case basis. However, similarly to the Canada Pension Plan, an earlier 2015 study by the Canadian Centre for Policy Alternatives found the Ontario Teachers' realized losses of over \$1.7 billion when the price of oil dropped by nearly half in late 2014. This oil price collapse provides a cautionary tale – within six months, conservative estimates indicated that Canada's largest pension funds lost over \$5.8 billion in equity alone through their continued association with the oil and gas sector, to say nothing of losses on corporate bonds, fixed income investments or other indirect holdings. Canada's other Big Eight members have not disclosed any divestment or carbon reduction targets for their portfolios.

CDPQ's commitment to reduce carbon output by 25 percent exemplifies that divestment need not be a dirty word for Canadian pension funds. Given that Canadian funds are particularly susceptible to asset stranding because of their exposure to the oil sands,

investments in carbon heavy holdings may be breaching the fund's fiduciary duty by favouring short-term interests over those who will draw on this retirement income.

UNIVERSITIES

One would be hard pressed in 2019 to find a Canadian university without a student divestment campaign. Since the earliest efforts in 2014, universities have adopted increasingly sophisticated financial and ethical stances to align their investments with climate obligations. The Université Laval is a Canadian pioneer, as the first to fully commit to divesting their endowment fund of fossil fuels in 2017, it has since been followed by Université de Québec à Montréal in 2018. More recently, Concordia committed in 2019 to fully divesting from coal, oil, and gas and reinvesting in sustainable funds by 2025. These actions are important in terms of setting an example, but they are still the exception rather than the rule. Full divestment has yet to be approved by the boards of most Canadian Universities who have evaluated divestment proposals.


The University of British Columbia was once openly critical of divestment, arguing in 2016 it would not address climate change or influence corporate behaviour; however, in the years since, UBC has established a growing low-carbon investment fund for climate-conscious donors. In November 2019, UBC's responsible investment committee recommended transferring an additional \$381 million of its endowment to the low-carbon fund, which would raise the amount of divested funds to 23.5 per cent of UBC's \$1.75 billion endowment. McGill also rejected divestment, for the 3rd time in 2019, arguing that the social injuries of fossil fuel investments weren't clear and that divestment would likely have a negative impact on diversification. However, the administration nevertheless established a socially responsible investment fund for more conscientious donors.

Accordingly, the universities of Victoria, Winnipeg, Concordia and Western have also offered "responsible investment" funds. Other academic institutions, such as BC's Simon Fraser

University the University of Ottawa, and the University of Guelph have opted to decrease their portfolios' carbon footprints in lieu of divestment, better to align their investments with national climate targets. The universities of Waterloo and Toronto joined McGill and Queen's University in committing to integrating environmental, social and governance principles to guide future investments, while still more committed to become signatories of the United Nations Principles for Responsible Investment Initiative.

Not every university campaign has led to positive contributions. Bucking the trend, the University of Calgary has committed to maintaining close ties with the energy sector, due to the fossil fuel industry's significant philanthropic support, employment opportunities for graduates and funding from the Government of Alberta, which itself receives a sizable portion of its revenue from oil and gas royalties.

Still, even looking past holdouts like the University of Calgary, these academic gestures, however important, do not mitigate the potential losses associated with continued fossil fuel investments in their conventional portfolios. Nor are they on par with divestment commitments made by European and American universities.

In all, Canada has a long way to go in distancing itself from the dangers of continued financial support of the fossil fuel industry. Disentangling our collective investments from the economic grip and influence of the country's oil and gas sector makes fossil fuel divestment a sensitive subject, but one we cannot shy away from. Otherwise divestment in Canada will remain a pipedream. 

Truzaar Dordi is a doctoral candidate in Sustainability Management at the University of Waterloo, working in the fields of climate finance, energy policy, and risk management. His research examines financial system stability along a low-carbon transition. www.truzaar.com





The Green Shark

Imagining the future of finance

When did nearly \$200 of powdery supplements, oils, and non-dairy “milk” become more economical than a bowl of apple cinnamon oatmeal and a cup of coffee?

It was a scorching late September morning and I was enjoying my morning ritual of a cold protein shake before I hopped onto the streetcar to get to work. Sipping my shake in the ridiculous humid heat, I thought contentedly about how much money I’d saved by changing my breakfast routine.

I was proud of my work as an Efficiencies Strategist.

I liked the flurry of Bay St and the prowess it took to grow business and industry. I liked the financial stability, which gave me the ability to take time off in the summer to garden. But the thought about how much things had changed stayed with me during my quick commute. When did it become normal to have heat alerts in September? When was the last time I actually cooked? Never mind picked something to eat fresh from a garden. My one potted tomato plant hadn’t yielded anything through the inconsistent summer weather of the past two years, so I switched to some idiot proof succulents this year.



As I mulled over my gardening challenges, Adam, a client and friend of mine, and his project came to mind. He was part of an Indigenous Urban Food Co-op, and I'd been supporting it from the outset. For some years now, he and his team had been successfully helping families learn more about food traditions and better eating, through a garden on the rooftop of my condo. What I liked most about the program was that it was open to anyone willing to learn about food independence. It wasn't unusual to find Jada, a Jamaican-Canadian food activist and educator, teaching a group of children about okra, while Adam tended a Three Sisters row. But, just like my one tomato plant struggled, the last couple summers had impacted the popularity of the program. The produce they'd deliver to local community kitchens or restaurants was becoming unreliable in quality and quantity, and last time we spoke, we'd discussed some serious changes that he needed to make to keep the program going.

As I hopped off the streetcar, my mind turned to work. I had to review an investment portfolio once I got into the office. I was mildly surprised to see Adam waiting for me in my office, as I hadn't expected him to be in town for another couple days. And he didn't look like he had good news. Adam and his team had been denied a land purchase up North. He knew the program was ready to expand and there was more he could do with it to maintain Indigenous Food Sovereignty. His plan was sound, I knew; I had examined it before he took it to investors. There was no reason for it. I had put him in touch with reliable agents, had done the risk assessment myself. The current owner had seemed beyond thrilled that a company from Toronto was interested in his land... and then Adam and his team, all FNMI, went up to visit and finalize everything. Suddenly the offer was withdrawn.

While we talked, I glanced out my large office window overlooking the city. It was cool enough inside, but it was 32 degrees that day and hot. 3 people had died the night before in a low-income seniors' building because the air conditioning broke a few hours earlier.

That said, it was better in Toronto than a lot of other places. Green rooftops, surviving ravines, and the downtown core being restricted to only EV traffic meant the city was livable, if congested.

And I had a good life...

But now there was an opportunity I couldn't pass up. The idiot who denied Adam and his team a chance to maintain their successful program was going to lose out.

Carbon offset markets were meeting geothermal investments, which were supplemented by solar expansion and passive housing design. Farmers were closer to parity than they had been in more than 80 years and blockchain was taking the guesswork out of predicting market trend and product value. I had been thinking of my very own carbon sequestration investment, but had been holding back because I wasn't keen on retreating from the world-at-large to homestead as an off-grid hermit.

I thought suddenly of my Great Aunt Mary. On my 10th birthday, she'd gifted me with the most boring birthday present a kid could get; of a packet of cherry tomato seeds and an S&P 500 stock. I liked planting the seeds and watching them grow and saving them for the next year. As I got older, I was fascinated by watching the stock grow and pursued a career in finance because of it. I never divested from Energy stocks, but I did move my dividends to "Just Transition" endeavours and put more stock into companies focused on renewables. Here was an opportunity for me to see the two parts of Aunt Mary's gift combine.

I had more than enough capital to venture myself, and make the investment needed to ensure this new phase of the food co-op could get off the ground. I asked Adam to stay while I called the real estate agent.

The life I lead now is different from anything I ever envisioned for myself, but so much more gratifying. Within 5 years Adam's Co-op, which I now actively participate in, was thriving. The co-op has become a hub for food education and agricultural innovation. Adam is tackling multiple projects related to Indigenous food sovereignty and biodynamic agriculture. As it turns out, we weren't the only ones eyeing change. Around the co-op, a new kind of innovation corridor has emerged. The "experiments" of my neighbours and I, people with expertise in an array of industries, have led to the development of business models and investment strategies that align with the regenerative and restorative nature of the circular economy. The Northern Innovation Corridor has become a case study for what could happen if we took our work even more seriously and focused on building community instead of just capital.

Any forecast of the future usually involves an examination of the past.

The character of Aunt Mary allowed me to imagine some of my intellectual insecurities as non-existent. A successful former Bay St. finance worker who elected to undertake a major change that proved productive if different from life as she'd known it. I would dare to say she's pseudo-Machiavellian, if you

understand the 16th century author more as a Ben Stein or Kevin O'Leary of his time, and less a thin-moustache twirling cartoon villain bent on all-powerful statesmanship. This is a person, after all, who had no compunction telling his head of state what a sustained profitable rule could look like when it came to a 'commoner's' agency:

"Moreover [a head of state] must encourage his citizens to follow their callings quietly, whether in commerce, agriculture, or any other trade that men follow, so that this one shall not refrain from improving his possessions through the fear that they may be taken from him, and that one from starting a trade for fear of taxes; but he should offer rewards to whoever does these things, and to whoever seeks in any way to improve his city or state".

506 years later, still one few people riding. Why, then, are so unsure about where should go? How can industry to account we either don't credit vs. a loan or apex predator? If definition for all four looking them up, then at least 3 other people

For myself, I term and didn't need to understand money. picture of public and money is hazy at best. for me to sort through investment/divestment will offer the best return or dividend, or what stock,

Niccolo's train of thought is would strongly object to we 21st century "commoners" our economy, our money, we expect government and for climate change when understand a line of a keystone species vs. you can provide a full of those terms without I challenge you to find at that can do the same.

understand economy as a to experience student debt Sometimes, though, my private movements of It takes some work what

bond, or exchange traded funds are socially responsible, or what shampoo is or isn't greenwashed, or who can best handle my taxes for the common good, or if the certification label on this can of beans cost more for the farmer that grew them than if it was just a "regular" brand. I think even a CPA would have some difficulty seeing a whole picture of a country's economy, never mind a global one, bound by their career to try as they might.

In my mind, the two main differences between the world of Machiavelli and the world now are:

1) Global Climate Change — In Machiavelli's day plague and war were more immediate concerns, and humanity had yet to be faced with the universal challenge of Climate Change and the massive system overhaul that is required to address it.

2) A (potentially) entirely literate populace.

The printing press was less than 100 years old when the Florentine statesman caught the writing bug, and thus, the population had little direct access to information about what their rulers were up to. Interestingly however, if tax was being collected in any given region, it was likely done locally and for a single specific





purpose, such as building a church in peacetime, or wartime protections. Whether or not the average peasant agreed with the tax was irrelevant as there was little they could do to oppose it, but they and the community at large likely had an idea where the money was going.

Unlike peasants 500 years ago, today, any village idiot has access to wells of information. Canadian citizens are also deeply concerned about Climate Change, and according to a 2019 CBC Survey, 65 percent of respondents felt the government was not doing enough to fight it. In theory, any citizen could put in the time to make an educated critique of the system, and then make personal lifestyle changes and demands of their elected representatives.

Yet taxation systems have become complex, and information overload often sets in. Most of us are in the habit of deferring the work of critique to the “they”. It’s “their” problem, “they” will take care of it, if it was bad for us “they” wouldn’t allow it. I have found “they” are a diverse and complicated personage. Sometimes it’s an industry, a ministry, academia, community but the common label is that it’s an “other”, to whom we defer responsibility.

Economists are not climate change deniers, and momentum towards sustainability is gaining in the world of “big business” more than the average person realizes. Some of the most promising signs of a global green economy are coming from private industry. Whether the creation of a Green Finance institute, Fossil Fuel Divestments, or blockchain platforms taking the mystery out of a product’s source and manufacture, the private sector is not idle and knows no industry is immune from Climate Change.

This isn’t to say there aren’t some medieval antics afoot here in Canada or elsewhere. Noisy opposers of carbon taxes or cap & trade plans style themselves as modern day Robin Hoods, but instead of robbing the rich to give to the

poor, the only thing they’re stealing is time from everyone. There are some questionable taxation frameworks applied to industry, particularly extractive. And while every major brand you can think of has some sort of impressive sounding long-term sustainability plan, it doesn’t take much to find news contrary to those commitments. Much of Canada’s long-term planning literally banks on the fossil fuel industry, putting pensions at risk of default.

Aunt Mary isn’t Robin Hood or Machiavelli. There’s no striving for a Utopian ideal or dwelling on bygone days. She’s not even trying to take on or be critical of problems happening in other parts of the world. She’s only equipped herself with knowledge, a diverse community of peers, and a commitment to work in and towards a justice-oriented culture focused on changing climate change. **AM**



Sabrina M. Chiefari is an environmental educator. She uses story-telling, community action and spiritual thought to help all people understand how to act wisely towards our water, air and earth.

Re-thinking International Aid

Can Canadian impact investment help the global post-Covid recovery?



PHOTO BY RENTTOOWN

The Covid crisis is fueling an economic and health catastrophe in developing countries. The World Bank estimates the coronavirus could send up to 60 million people into extreme poverty, threatening to erase the progress to alleviate global poverty during the last three years.

While the focus of Canada and most developed countries is on their own Covid problems, there is a growing realization that rich nations also need to focus on the situation faced by poor countries. All people have an interest in controlling the virus globally

– and developed countries have an international obligation to help poor countries hit hardest by the pandemic.

For Canada, this means that our traditional notion of international development – a mix of government funding and humanitarian giving – must change. If Canadians want to play a significant role in the global post-Covid recovery, we're going to have to look beyond short-term government and charitable funding to long-term impact investment.

There are urgent pressures to provide impact investment for health infrastructure and long term economic

development. These pressures come on top of an ambitious pre-Covid agenda set by the UN Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change. It's estimated that before the coronavirus struck, the price tag for achieving the SDGs on poverty, hunger, clean energy and other issues in



CAFIID

Canada Forum for Impact Investment and Development



developing countries was \$2.5 trillion a year. The Covid crisis has only increased that bill.

While the task is formidable, in Canada there is a solid base of organizations raising impact capital for global development, and they have accumulated a significant foundation of assets.

Canadian investors have more than \$2 billion in impact assets deployed in developing countries, according to a November 2019 report by the Canada Forum for Impact Investment and Development (CAFIID), a group of 70 non-profits, asset managers, private investors and advisors. The report, titled Canadian Impact Investing in Emerging and Frontier Markets, showed these

investments include debt and equity placements in microfinance, agriculture, clean energy and other environmental and social sectors.

After the Covid crisis hit, CAFIID followed up with a second report in early 2020 showing that while this investment is under growing financial risk, most of these investors intend to maintain their presence in developing countries. Many are even planning to increase their commitments.

This presents an enormous challenge. Not only must these private and public investors deal with the risk of the Covid crisis, they must also ramp up to meet Canada's share of the additional capital needs of the SDGs. This comes at a time when the federal government has delayed approvals for innovative international financing due to the coronavirus.

There will need to be a tremendous boost in Canada's capacity to raise investment capital for international development. While the barriers are significant, CAFIID sketched out some potential new directions for action by investors, government, NGOs and the

financial industry. The forum's 2019 report identifies six areas where more work needs to be done.

One of the key barriers to growth is confusion by stakeholders on the role of impact investment, philanthropy and government funding. The report calls for initiatives to educate players in the system to clarify the roles of impact capital by donors, foundations, NGOs, private investors, advisors and public investors.

There is also an important need for capital markets to incorporate social and environmental impact management alongside traditional assessment of risk and return. One of the concrete ways this can be done is for Canadian financial institutions, funds, asset managers and advisors to sign on to the Operating Principles for Impact Management, a new global signatory agreement fostering standardized impact investment practices and reporting.

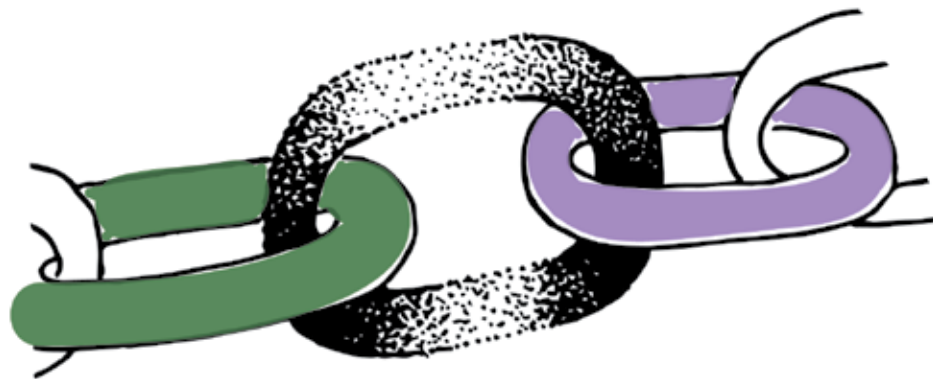
In order to attract capital from large institutional investors such as pension funds, the report suggests that the banking and investment industry



develop new institutional investment pools for developing country impact investments. A guaranteed investment certificate (GIC) model, such as those developed by Oikocredit and Kindred Credit Union, is one of the ways financial institutions could create new international development savings products for individual investors. There is a significant opportunity for NGOs, government and investors to collaborate to create new “blended finance” models, combining concessionary capital from government and charitable sources with traditional private investment.

CAFIID argues that the financial industry needs to develop new tools and services to support investor confidence and capability in developing country impact investments. This includes third party impact ratings of managers and an expansion in banking services for impact investors.

There is also a need for specific training of finance professionals in the area of impact investment, particularly in developing country impact investment. New programs are necessary to better equip small and medium enterprises in



developing countries to enable them to absorb the expected increase in capital available.

Finally, CAFIID argues that there should be action to eliminate regulatory barriers, calling for a consultation by the Canadian Securities Administrators, (the umbrella organization for Canada’s securities commissions) to ease market access for impact investment. The report urges the federal government to mandate that impact investments qualify for RRSP and other registered accounts.

While the Covid crisis has created enormous costs and pressures at home, Canada cannot and should not ignore its obligations to help ease the

pandemic around the world. Canada’s impact investors are ready to step up to help meet these goals. But they can’t do it alone. It will take concerted action by investors, the financial industry, the philanthropic community, policy makers and regulators working in partnership with communities in developing countries. If done successfully, this approach to global post-covid recovery could permanently transform the landscape of international development. **AY**

How to invest in Oikocredit

Investors in British Columbia and Ontario can invest in Oikocredit through dedicated credit union term deposits. The deposits pay out regular interest, which is set by each participating credit union. The deposits are eligible for RRSPs, RIFs and TFSAs. Investors need to be a member of the credit union in order to invest.

BC – Vancity Shared World term deposit. www.vancity.com

Ontario – Kindred Credit Union Oikocredit Global Impact guaranteed investment certificate. <https://www.kindredcu.com/>



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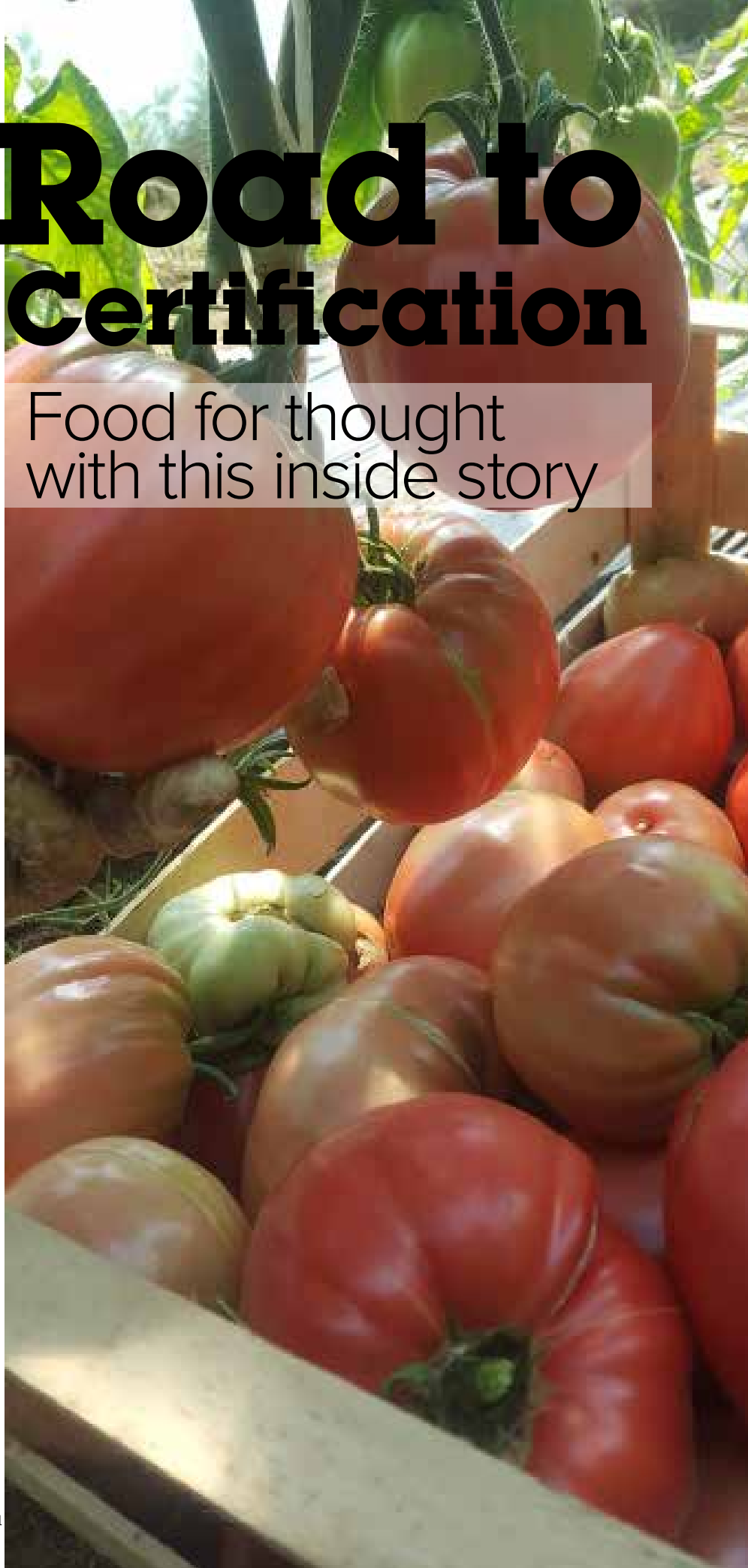
The Road to B Corp Certification

“Becoming a leader is synonymous with becoming yourself,” wrote American leadership guru Warren Bennis: “It is precisely that simple, and it is also that difficult.” Difficult, yes, because it’s not always easy to be yourself, especially early in one’s career or the early stages of a company’s development. When I founded the Neighbourhood Group of Companies, an association of sustainable restaurants specializing in locally crafted foods and beverages, incorporating my personal beliefs into the fabric of the business took time.

It began with baby steps back in 1990 when I opened the first restaurant, a pub that sold only local microbrews and featured bison. By the mid 1990s the pub’s menu began featuring more Ontario food and wines, a product selection based on my regionalist purchasing philosophy of buying local to ensure a security of supply. This approach created a more diverse economy and reduced “food miles,” crucial considering that food travels over 3,000 miles on average to North American plates. Our company tagline became “By Neighbours, For Neighbours,” a mantra that guided all major decisions.

Our customers embraced the promotion of local products, our miniature form of patriotism. We were “buy-cotting” as opposed to boycotting, a phenomenon describing people’s tendency to express their

Food for thought
with this inside story



values through purchases.

The pub's sales grew exponentially. Throughout the 1990s our sales tripled from \$400,000 annually to \$1.2 million by the new millennium. I became more emboldened about incorporating personal values into the company's DNA. Drawing on my roots with Canada's Green Party, of which I was a founding member in 1983, we began operating the group in a more sustainable fashion. We started by composting our kitchen waste before turning to eliminate plastics, sourcing recyclable take-away containers and using uniforms made from organic cotton. Slowly, this sustainable *modus operandi* pervaded everything we did.

In 2005 I floated the idea with my business partner of converting our restaurants to green energy at a cost of \$600 above our normal monthly electricity rates – an additional \$7,200 expense per year. I argued the move was consistent with company values, and they agreed. Other restaurateurs said I was crazy, while conservative business acquaintances said it was utterly unnecessary. In the end, NGC received a lot of favourable press for the switch. Regulars began complimenting us on our commitment to changing how we governed ourselves. Buy-cotting was good for business. Our 2005 sales were \$1.2 million per annum – just six years later, through three years of recession, our sales surpassed


\$2.1 million. For a 90-seat restaurant!

My son Court and I encountered the BCorp movement at a meeting in Toronto in 2012. We loved their motto: "People using business as a force for good." Instead of competing to be the best in the world, the idea was to be the best for the world. Unlike traditional corporations, certified B Corporations must consider their impact on all key stakeholders, including employees, customers, suppliers, the broader community – and the environment. Getting certified involves measuring positive results on these stakeholders.

The rigorous certification process itself required revitalization every two years, proof that, as a company, you paid more than lip service to corporate sustainability, earning the chance to stand alongside giants like Patagonia and Ben and Jerry's, companies that changed the

way businesses can operate.

Our first attempt at achieving BCorp certification fell short. But with changes to our operation we received certification in 2016, a feat which, as a company, gives us added credibility with our customer base and employees, the majority of whom are millennials who relish working for businesses with purpose.

The Neighbourhood Group of Companies is now, in many ways, an expression of my own values. It took many years to realize this is where I wanted the business to go. The result was hard work, but much contentment after decades spent effecting positive change in our corner of the restaurant industry. 

Bob Desautels is a writer, entrepreneur and environmentalist. He is Chair of the Neighbourhood Group of Companies.



"Certified B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose. B Corps are accelerating a global culture shift to redefine success in business and build a more inclusive and sustainable economy."
-Bcorp



Love, Money and City-Building:

10C's Social Finance Journey

Have you ever considered the impact of investing locally?

We have. 10C, a shared workspace and community hub for social enterprise, has built a placemaking project and social finance investment opportunity capable of answering these questions. And through the recent purchase of a 15,000-square-foot building in Guelph, Ontario, our community has turned a dilapidated furniture store into a significant community asset.

10C's mission is to "create space for change", and this approach allows us to offer coworking, private office and community event space for over 150 members working to improve community.

In 2008, we launched at 10 Carden Street in a small leased space, and gradually almost quadrupled the 800-square-foot location at which we started. Hundreds of events and thousands of people graced the space

in our first years, as staff balanced the need for inclusivity with the accessibility constraints of an old building and the financial anxieties of running a start-up, not-for-profit social enterprise.

Between 2012 and 2015, 10C began actively exploring options to expand its model and deepen its impact. By this time, Downtown Guelph was seeing strong interest in real estate development, with new commercial and residential projects underway. Many not-for-profits felt squeezed by the increased pressure for space and left downtown for more affordable rent outside the core. With a business model only beginning to find balance and no money in reserve, it became clear that 10C needed to shake up its model.

10C is a part of a global coworking movement taking root in downtowns large and small. Coworking, or shared workspaces, first emerged in the early

2000s in San Francisco as a means for workers to organize to collaborate, share resources and work beyond the confines of traditional office spaces.

It was not until the 2008 economic downturn that coworking became a truly global phenomena. Deskmag, an international coworking publication, estimates that in 2019 there will be 2.2 million coworkers in over 22,000 locations around the world.

Researchers have attributed the growth of coworking to three distinct but interconnected factors. The first relates to the decline of manufacturing and the rise of creative and knowledge-intensive economies. This phenomenon is occurring spatially as creative industries reclaim spaces once occupied by urban manufacturers.

The simultaneous rise of the sharing economy is the second factor. Coworking spaces came about as a

means to not only share space but also curate the needs of like-minded, often socially-conscious workers.

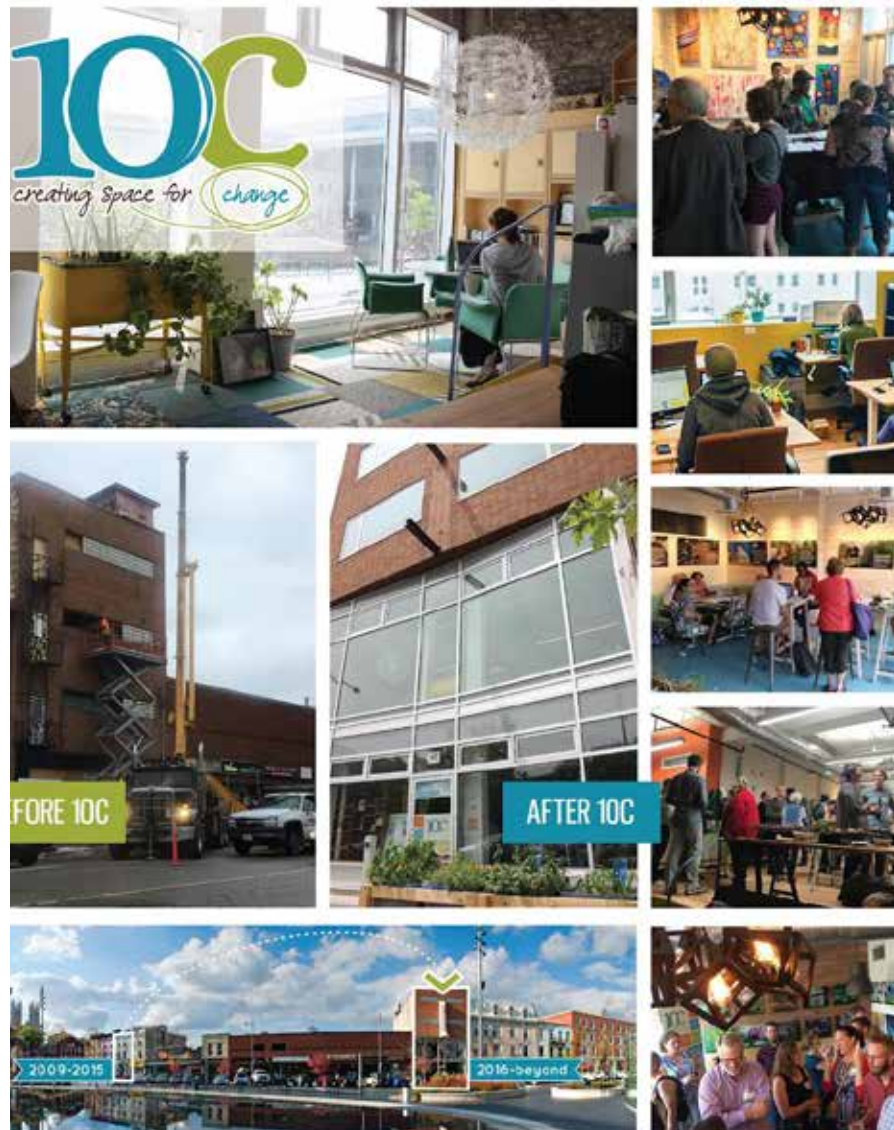
Finally, and perhaps most concerning, coworking spaces became the only office locations many precariously employed workers could afford. With more individuals working part-time or living contract-to-contract, coworking spaces began providing stable, amenity-rich workplaces that helped take the sting out of the gig economy's nastier tendencies, while providing valuable social and professional networks to entrepreneurs and freelancers.

These interconnected trends illustrate how labour market changes have impacted cities. As economies shift from traditional manufacturing to knowledge industries, and as the cost of living in urban centres rises, cities have been grappling with how to provide services and support to a new generation of workers.

As these urban inequities continue to grow, cities and coworking spaces can collaborate to address challenges in their communities. In Kitchener, for example, the municipality has identified support for coworking spaces in their 2012 Downtown Action Plan. The plan created a new incentive, the Startups Landing Pad Program, that aims to foster downtown renewal and local economic development by connecting new businesses incubated in coworking spaces with renovated second storey offices. Not only does this program fill vacant office space in the core, but it also serves to retain newly created businesses within the city.

And in Guelph, 10C's mission is to address the same community need for connectivity and affordable space. But buying and maintaining a commercial property isn't cheap. Coming out of its commitment to work with local partners, it was natural for us at 10C to try and leverage an innovative approach to financing the purchase and renovation of a declining downtown building, so we pursued collaboration and social finance.

Social finance is a way to achieve positive community outcomes via private capital. The concept also prioritizes



place • people • program • possibility

stakeholder engagement, a common good and sharing any benefits resulting from an initial investment. Innovative approaches to financing, what's sometimes called "finnovations," initially meant reconceptualizing traditional finance to include social impact.

At 10C, with very little cash capital, our vision for creating the coworking space we envisioned was to develop a community investment opportunity to build the equity required to purchase and redevelop the property. We had social capital from seven years of operating in Guelph, and at that point,

we imagined we could leverage that social goodwill to ultimately put financial returns back into our supporters' hands.

We looked to community bonds. In southern Ontario, the idea had been pioneered by the Toronto-based Centre for Social Innovation on properties it purchased in 2010 and 2014. Our goal was to match the first mortgage financing with community bond investment, leaving us able to repay the first mortgage and community bonds with operational proceeds over a 25-30 year timeframe. We hoped the project would steward the property as a strong

The image shows a multi-story brick building with large glass windows and doors at street level. A vibrant, hand-drawn mural is superimposed over the left side of the building. The mural has a green background at the top with the title "HOW THIS WORKS" in blue letters. It features several circular icons containing the letter 'C', each labeled with a word: CATALYZE, CREATE, CAPACITY, CHANGE, COMMUNITY, COMMISSION, EXPLORE, and COORDINATE. To the right, there's a section titled "NURTURES MEMBERSHIP" with heart symbols and a "JOIN IN!" speech bubble. Below that, a yellow banner reads "IMPROVED ACTIVATED SOCIAL ENTREPRENEURSHIP AND SUSTAINABILITY PRACTICES". Further down, a graphic of a bicycle wheel is labeled "BIKES FORUMING", and next to it, a yellow circle contains the text "MODELS SUSTAINABLE GREEN PRACTICES". A speech bubble says "WE HAVE A STRONG CULTURE". Another speech bubble states "TOC LOVES PEOPLE" above a drawing of three stylized figures. At the bottom left, a blue area contains the text "HOSTS and CONVENES" with cloud-like shapes. On the right side of the building, a black oval speech bubble says "COMMUNITY RESILIENCE and VITALITY". A sign for "ERIC" is visible on the ground floor. In the foreground, there are outdoor tables and chairs under a white umbrella, and a small figure of a person wearing a crown stands on the sidewalk.

employees working in a variety of social and environmental sectors while accommodating hundreds of visitors who use the event spaces every week. They come to take part in the community programming of 10C and its numerous collaborators, including the University of Guelph, Guelph Arts Council, Wellington Water Watchers and Wildlife Preservation Canada, groups that now use the space to amplify their community engagement and organizational work.

Canada in meeting the United Nations Sustainable Development Goals. For example, eMERGE Guelph is working on goal number 13, Climate Action to move Guelph to 100% renewable energy by 2050. Other members are working on wellness and inclusivity and specifically goal number 5, Gender Equality, with workshops to empower all women. Changemaking work is often intersectional and difficult to measure. Collecting data and measuring the impact of 10C and our members is one of the program areas 10C will be focusing on moving forward.

But we're not content to act locally without thinking globally. Our changemaking members are the essence of 10C and currently, we are curating this membership based on how their missions and work supports

A recent survey of 10C members showed that the combined forces of Chalmers, 10C and its 200 members are working towards all 17 UN Sustainable

Development Goals. And it's not just the SDGs – as part of our accountability to our investors, 10C has reaffirmed its commitment to measure its impact using the IRIS indicators, an initiative of the Global Impact Investing Network, which are designed to measure the social, environmental and financial performance of an investment.

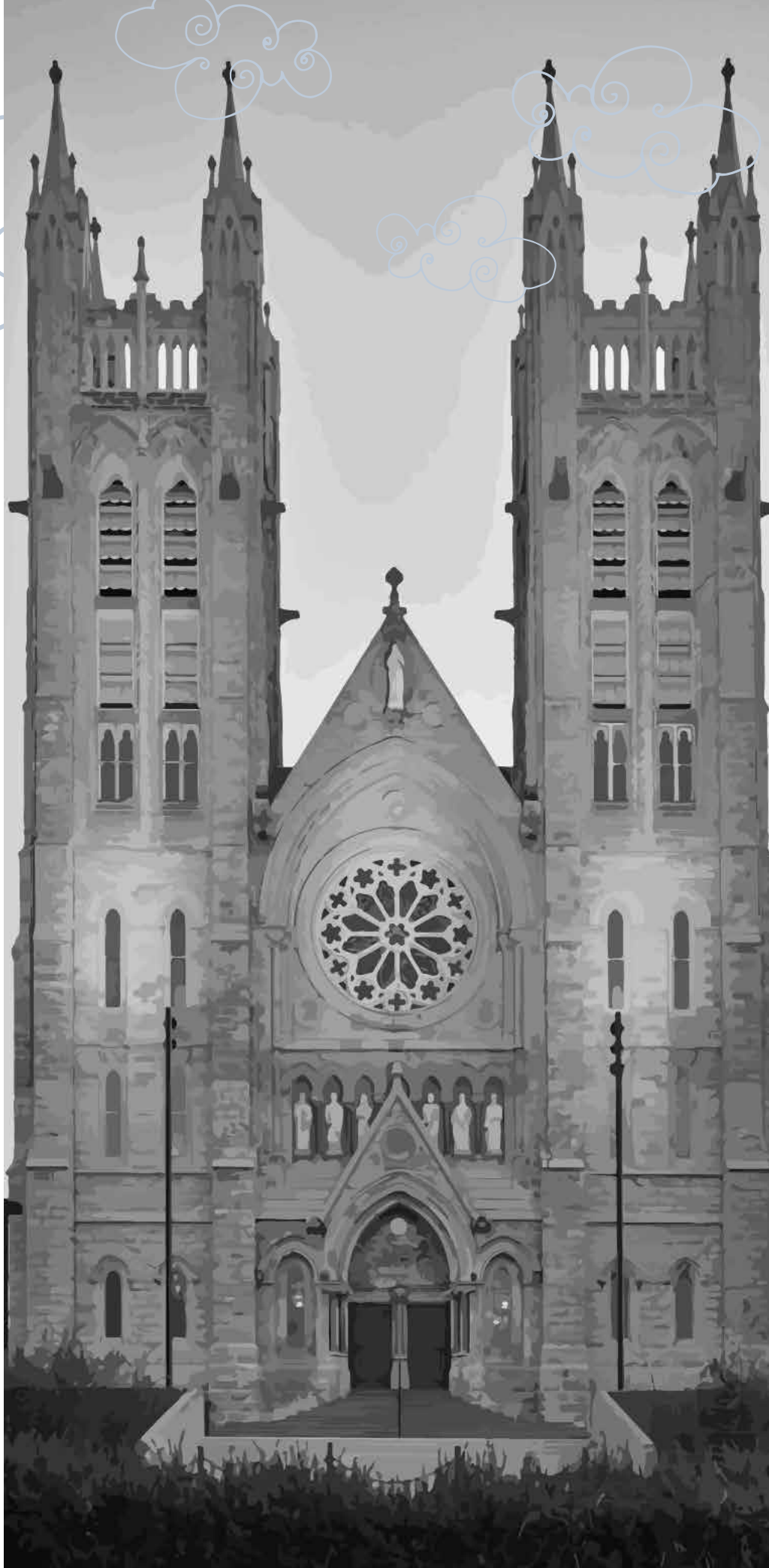
This commitment means that social returns, alongside a solid financial return, will be shared with our investors. To date, 10C's largest global sustainability impact has been in SDG number 11 – Sustainable Cities and Communities. We have successfully increased the occupant density at our redeveloped location by almost 2,000 percent above what existed before, while boosting the physical accessibility of downtown Guelph by adding 15,000-square-feet of accessible space for community event programming.

Our experience with community bonds has been a powerful example of changemaking projects capable of taking root anywhere across Canada. Social finance in communities large and small offers like-minded groups a chance to invest in a shared vision for local projects. As the world becomes an increasingly complex space to work in, those creating space for change can only make it easier to navigate. 



Julia Grady is the Executive Director and Co-Founder of 10C Shared Space. Working with long-term community benefit as her core purpose, Julia has led 10C through a decade of innovation, expanding into new project areas and providing a voice for valuable community content – and action.

Audrey Jamal, PhD is an adjunct professor in the Gordon S. Lang School of Business and Economics at the University of Guelph. With a background in urban planning and community development, her research focuses on local economic development strategies for smaller urban centres.



FrontFundr's Investor Revolution

How an online equity crowdfunding company in Vancouver is democratizing the industry



"We drink our own whiskey," Peter-Paul Van Hoeken says with a congenial laugh, referring to Caledonian Distillery & Twa Dogs Brewery's successful Frontfundr campaign. FrontFundr, which Van Hoeken founded and runs as CEO, has also benefited from his seven-year-old FinTech company's online investment platform. And why not? The company provides an online space to raise funds through equity crowdfunding campaigns, making investments available to a much wider public than the standard equity

investment model. It's an innovative network, he says, one that brings diverse investors and early-stage companies together.

Headquartered in Vancouver with a staff of 19, six of which are based in their Toronto office, the company gives investors a simple digital platform to locate and invest in companies with business acumen that also speak to their ethical investing needs. For startups and emerging ventures, those that typically carry the highest risk – and therefore have

a harder time landing investment and capital – Van Hoeken's company provides the opportunity to connect directly with a pool of investors, both novice and seasoned.

Disillusioned after years of working in the banking industry in the Netherlands, the former corporate and investment banking strategist uprooted his family in 2010 and moved across the Atlantic. Jumping into consultancy for early-stage and growth companies, Van Hoeken quickly noticed how difficult the traditional investment model to raise capital was to penetrate. "There was a limited source of venture capitalist firms," he explains, "and no infrastructure to facilitate the whole process."

Could digital technology bring both sides together? It was already happening widely in Europe. And so as a creative solution to the capital problem he so often encountered as a consultant, by the end of 2013, FrontFundr was born.

Crowdfunding, in its simplest form, is an exchange of values. A startup generates a product or project and taps into the public through online campaigns and social media to aggregate small amounts of money to build or expand its operations. When the average person thinks of crowdfunding, the first players that likely come to mind are Kickstarter and Indiegogo. Over 15 million people globally have invested in a Kickstarter campaign since the company's inception in 2009, with some \$5.1 billion pledged. With that, almost 185,000 projects have found the capital they needed, from creatives such as filmmakers and artists that collected money to complete albums and movies to publishers launching new magazines or cookbooks. Similarly, through Indiegogo investors can help everything from a brewery trying to get off its feet to companies trying to commercialize electric scooters.

Indiegogo has brought in over nine million backers around the world since 2008 and launched more than 800,000 campaigns.

The Ontario Securities Commission, however, identifies three crowdfunding models – those centred on donation, rewards or equity. The donation-based format is any funding campaign where a funder contributes capital in support of a cause – think disaster relief efforts. Rewards crowdfunding, the most common in mainstream minds, gives a funder samples of the product or discounts in return for their capital. If you pledge \$180 or more into NICHA, for example, a sustainable clothing brand that makes clothing using recycled fabrics, they'll ship you a purse made from textile scraps. Kickstarter, in this case, brought the two parties together and facilitated the transaction online.

But the final model, equity crowdfunding, is a growing alternative to a traditional investment format. It functions with the same principle. In exchange for an investor's funds a company hands over stakes or small shares – rather than, say, a purse. Instead of supporting a specific project by buying perks, you become an owner and recipient of future financial returns.

Traditionally, the large expenses incurred in establishing any new venture in its early stages are covered by raising capital via a small pool of accredited investors, angel donors or through funding institutions like venture capital firms.

Yet a lack of public access to capable investors remains a major obstacle for socially-minded, would-be businesses. Investor accreditation, under financial regulations law, varies in different provinces, though its cornerstone concepts are meeting the net worth requirements, having the necessary market knowledge and putting a client's interests first. But this investor space, as we've always known it, has been near-impossible to penetrate for an average business developer. It's here that FrontFundr found its niche by creating a virtual space accessible to all. "We're democratizing the industry," Van Hoeken says.

Regulations for selling equity to the public, however, are not uniform across the country. At least not yet. Although it's in the works, in Canada there is no national securities regulator, authority or legislation – regulation, where it exists at all, is the purview of provincial and territorial governments. Organized equity sales like what FrontFundr offers can only legally take place via online portals in eight provinces: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick and Nova Scotia. Only their residents 18 years and older can invest in FrontFundr. Meanwhile, all other provinces and territories are still mulling over what, if any, regulation they intend to implement.

The first reported online funding portal in Canada dates back to Ontario's Optimize Capital Markets. Launched in 2009, OCM, an institutional web crowdfunding company, remains a



investors the use of online equity crowdfunding. Ontario falls within the exempt market category, a portion of Canada's capital markets that does not require a legal securities framework when selling securities. This means there are fewer restrictions imposed on businesses selling investments as equity, or shares in the company. This dramatically widens the pool of possible investors by allowing anyone with cash to invest the ability to participate in the province's entrepreneurial sphere.

While Van Hoeken admits to struggling in early 2013 when these regulations were being hashed out, FrontFundr soon became one of the few platforms capable of managing personal investments by bringing together enough capital to meaningfully help businesses that people respect. Like any crowdfunding campaign, people have to care about a company's success before handing over their money, with or without the promise of financial returns. Potential investors also have to trust the institution they're donating through. "This was a totally new concept," Van Hoeken says. "It took me a long time to get regulators to pioneer this with me. It was complex."

Regulations are crucial in this sector for obvious reasons, including the risk of losing your investment funds and the dangers that come without the protections offered by a securities regulator. Because the traditional risks associated with investing in any untested private company are ever present, the FrontFundr team makes sure that all funders, accredited or not, are well aware that start-up investing is inherently risky; anyone could lose the capital they invest. And while accredited investors generally have both the knowledge and "disposable" funds, more inexperienced investors may not. Van Hoeken is well aware of the danger. As a buffer

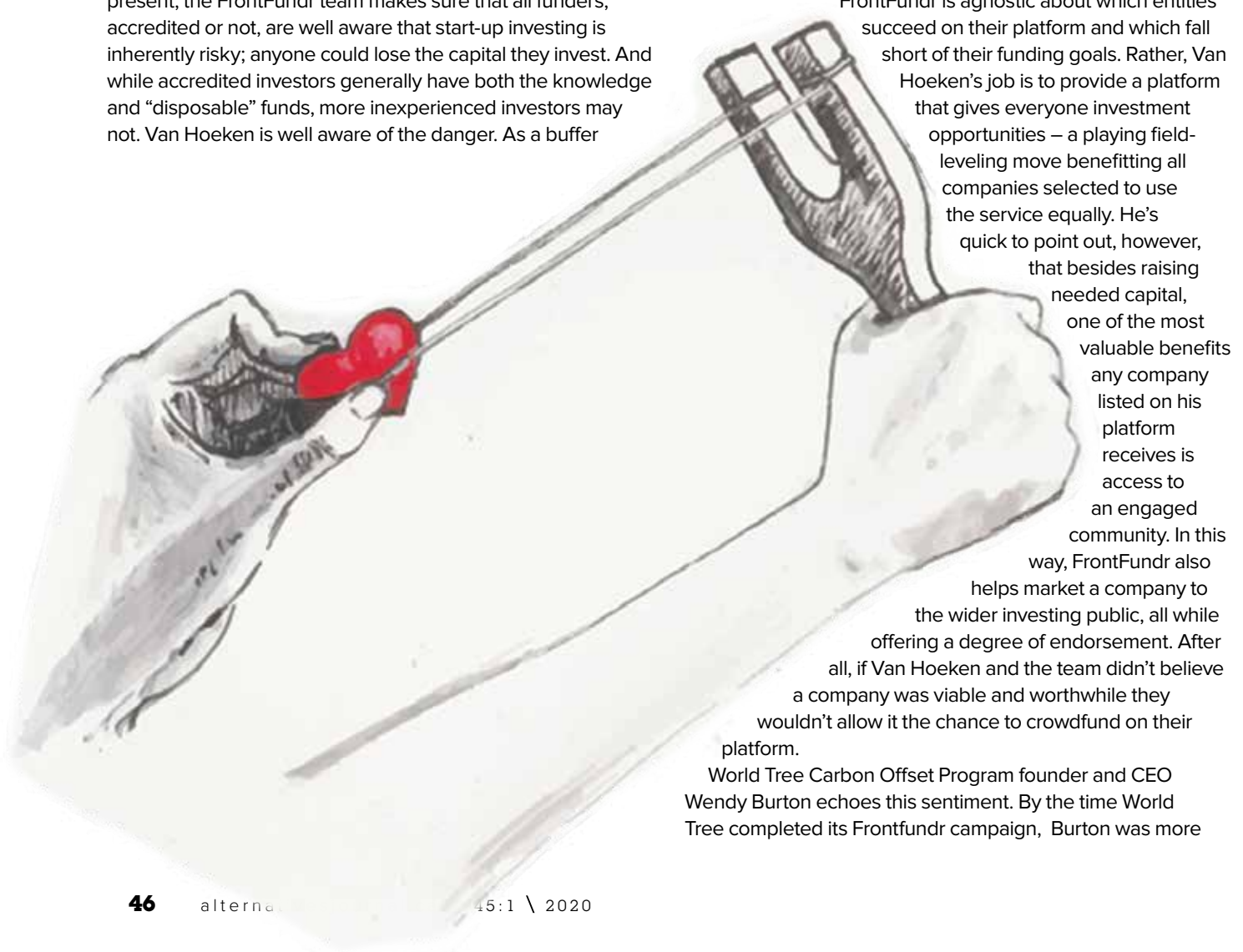
against unexpected losses, he says, his team screens each company for financial viability and stability as a way to protect investors, whoever they may be.

Bernard Tan was initially unfamiliar with the equity crowdfunding space. Yet, since summer 2018 when his company, RE Royalties Ltd., began its FrontFundr campaign, he's become a true believer in how well the crowdfunding network functions. Later that year, the company went public on the TSX Venture Exchange, along with a nearly \$13 million equity-financing round. And Tan, as founder and CEO, explains that their FrontFundr campaign recruited a significant number of investors in just a few months.

A financial investment company working specifically in the renewable energy field, RE Royalties re-branded its impact investing business in the last couple of years. Tan knew the company needed capital to invest in the growing global renewable energy sector. His vision is to offer engaging solutions to help finance a green energy future, an aim Tan hopes to accomplish by acquiring stable and diversified long-term royalties from that sector. Of the roughly 84 new investors that participated in the company's 2018 financing, 45 have come from Frontfundr. "The process was smooth and seamless," Tan says. In time, he hopes FrontFundr will open their platform to publicly traded companies as well. "They could benefit from the system."

FrontFundr is agnostic about which entities succeed on their platform and which fall short of their funding goals. Rather, Van Hoeken's job is to provide a platform that gives everyone investment opportunities – a playing field-leveling move benefitting all companies selected to use the service equally. He's quick to point out, however, that besides raising needed capital, one of the most valuable benefits any company listed on his platform receives is access to an engaged community. In this way, FrontFundr also helps market a company to the wider investing public, all while offering a degree of endorsement. After all, if Van Hoeken and the team didn't believe a company was viable and worthwhile they wouldn't allow it the chance to crowdfund on their platform.

World Tree Carbon Offset Program founder and CEO Wendy Burton echoes this sentiment. By the time World Tree completed its Frontfundr campaign, Burton was more




than ready to sing FrontFundr's praises. "We've built a supportive working relationship with their team," she says. "We have Peter-Paul come to our events and we advertised his logo on our website."

Launched in 2015, World Tree's Eco-Tree carbon offset program is an eco-conscious initiative that makes it possible for members of the public to sink cash into the soil. By putting capital behind World Tree and their Empress Splendor trees, reportedly the fastest growing hardwood in the world, investors help the planet absorb carbon, protect natural old-growth forests and support local farmers in North and Central America. The catch? Empress Splendor trees may be fast-growing, but they're still trees. Investors will see a return only after ten years, the timeline it takes their hardwood to be harvested and sold for a projected price of \$3 to \$14 per board foot of timber.

RentMoola, an online payment network that makes paying rent easier and more rewarding via lifestyle promotions, raised nearly \$2.5 million through 19 investors. Peekaboo Beans, meanwhile, a clothing company creating ethically manufactured playwear for kids, raised more than \$738,000 through a dozen investors.

While "The New Capital Market," one of FrontFundr's initial marketing mottos, doesn't work for Van Hoeken anymore ("We're thinking of changing it – it doesn't carry the right marketing meaning"), that appears to be exactly what the company is doing. FrontFundr's platform is creating a new marketplace that allows both seasoned and novice investors to root for, and be a part of, the success of local businesses whose core philosophy they believe in.

In 2018, eight years after arriving in Vancouver, Van Hoeken expanded FrontFundr with an office in Toronto, the nation's business hub; it makes sense with a thriving platform behind him and 49 funded companies operating in Canada and around the world. Drawing from a growing community of investors, FrontFundr has successfully raised over \$40 million and counting. Not bad for a vision to pair everyday investors with ethical businesses. 

Sheima Benembarek is a Moroccan Canadian Toronto-based freelance writer and publishing professional. She has held various positions within the book and magazine sector. Her writing has appeared in the Literary Review of Canada, Maisonneuve, Broadview, and This. She is currently completing a University of King's College MFA in creative nonfiction.



Greening Canada's COVID Recovery

A\J's founder shares his perspectives

Rebuilding the economy after the COVID pandemic will be complex, challenging and long-lasting. Almost every part of our economy has suffered. Some sectors may rebound quickly, but many will take years to recover fully. National, provincial and local recovery planning is essential and so is a broad-based buy-in. The process must include small businesses, civil society, public and private institutions, consumers, corporations, and investors large and small.

The good news is that Canada, at this writing, has handled the crisis relatively well and our broad solidarity in the response suggests that our society has the capacity, in time, to emerge better than it was. We can aim for something beyond 'getting things back to where they were'.

With this very idea in mind, back in May, a coalition of Canadian civil society groups put forward six principles for a just COVID recovery:

- 1) Put people's health and wellbeing first, no exceptions
- 2) Strengthen the social safety net and provide relief directly to people
- 3) Prioritize the needs of workers and communities
- 4) Build resilience to prevent future crises
- 5) Build solidarity and equity across communities, generations and borders
- 6) Uphold Indigenous rights and work in partnership with Indigenous peoples.

A better future, as envisioned in these principles for a just recovery, requires significant environmental protection and social equity improvements. Recovery

is thus both a challenge and an opportunity, since the three core needs of better environmental protection, greater social equity and inclusive nationwide economic recovery, can be achieved simultaneously.

These changes are possible because



this economic recovery requires investing to create new products and services, build new infrastructure, and alter many institutions.

The good news is that interest rates are low and almost certain to remain low for years, which will make this essential spending possible as public and private borrowing will be more manageable. Extensive recovery expenditures will allow a rethinking of many of the things we do and how we do them. It provides the opportunity to do more than just 'restore' what we had. COVID has shown Canadians that many aspects of our

society and economy can and should be improved, with long term care facilities emerging as one of the most evident examples.

Almost all of us rearranged our lives over the past five months. We have collectively learned just how adaptive we can be, and we have also learned that we can function very well as a society under pressure. Leaders of almost every political stripe adapted to the task at hand and societal and community leadership emerged everywhere. We now know we can create and undertake a multidimensional recovery. Many components of that effort readily lend themselves to serving all three core needs. Why would we not improve the environment and social equity at the same time as we rebuild our economy?

Our economic recovery will need to create construction, manufacturing and commercial jobs (restoring, in the latter case, many hard-hit small retail businesses). Many design and construction jobs are associated with green infrastructure innovations, from high speed rail in heavily travelled corridors to building complete streets that are safely accessible to cyclists, pedestrians and cars. This is also an opportunity to retrofit houses and offices for energy efficiency and to manufacture and install improved heating and cooling systems suited to Canada's climate.

One of the most important reasons green economic actions fit well with COVID recovery is that they require a broad range of skills and have the



capacity to distribute work opportunities from coast to coast to coast within urban, suburban and rural settings. They also require innovation and new skills and products that can be used throughout the nation and elsewhere in the world. I will close with a few examples.

Renewable energy production and energy efficiency lend themselves to geographic distribution. Wind energy is abundant along Canada's thousands of miles of coastline and throughout our rural landscape. From Newfoundland to the Great Lakes, to the prairies and the North, wind energy is supplying locations otherwise powered by high cost fossil-fuel generators. Solar installations and energy efficiency retrofits can create construction jobs in urban areas and First Nations reserves. The job skills required for these renewable energy projects include everything from electricians, plumbers, carpenters, transportation workers and heavy equipment operators, to manufacturing workers, metal workers, researchers, engineers and technology innovators (especially in energy storage and new distribution systems). Renewable energy is also a safe, consistent yield, investment opportunity.

Geographically dispersed and innovative green COVID recovery possibilities go well beyond renewables

and energy efficiency. I will mention four others, the first two just in passing: the electrification of transportation be it rail, buses, trucks or automobiles (where the key to success here is continuous battery advances), and the restoration of habitats including forested areas, grasslands and wetlands.

Also important is the potential for environmental innovation in Canadian agriculture. One possibility is small scale year-round vegetable production (or extended-season agriculture in the far North) with little or no fossil heating. Large greenhouses for cool weather and frost resistant crops like peas and spinach embedded below the frost line can be surprisingly productive. As well, carbon farming (storing carbon in the soil) improves crop yields while reducing atmospheric carbon and methane.

Green building design and construction can be another interesting area to develop, incorporating new and innovative building materials. Buildings can go beyond low or even zero energy. They can be carbon sinks that incorporate agricultural wastes or waste paper that might otherwise end up in landfills, where they release greenhouse gases on decomposition. Embedded in building materials they add to material strength and insulation. Carbon-embedding hemp can become

what is called hempcrete (See, for example, Chris Magwood, Sustainable Home Design). There are numerous embedded carbon building materials that could create new Canadian manufacturing opportunities.

Green job and investment opportunities, perhaps aided by government infrastructure and research funding, are numerous. Green investments often produce more jobs and are better long term investments than fossil fuels or other extractive industries that Canada has generously helped in the past. As many provinces begin re-opening and creating recovery plans, let's ensure that we rise to the challenge of recovering a society better than the one in which we lived before the pandemic. [\[A\]](#)

Robert Paehlke is a professor emeritus at Trent University where he taught environmental policy and politics for 35 years. About 40 years ago, he envisioned a magazine that was both scientifically sound and journalistically interesting, and Alternatives was born. "Bob P," as we call him, sits on the magazine's editorial board and he contributes articles and blog posts as often as we can trick him into it.

When Jane is Gone

Can we let Jane Goodall retire already?

Jane Goodall leaned back in an armchair by the window. It was a cold, wet southern Ontario afternoon in late April. Days earlier, Goodall gave an Earth Day lecture at the University of Toronto, and between travelling, interviews, convocations and distinguished luncheons, the planet's most famous primatologist hasn't had a chance to catch her breath. Her famous stuffed monkey, Mr. H, was peeking out from inside a reusable bag near her chair, eating his stuffed banana; her luggage sat neatly where she set it down moments earlier.

"What I do is travel 300 days a year around the world," she tells me, "giving lectures, meeting people, giving interviews and getting exhausted." You've given so much, I tell her, saying in a not-quite-fangirl way that she's a living legend. Goodall interrupts my gushing with a joke. "I'm still living. Just," she says. Everyone laughs; Goodall chuckles. We're all thinking it, though she's the only one brave enough to say it – Jane Goodall is getting old. The good doctor will soon celebrate her 86th birthday, and no one knows how many more she'll have. And the frantic pace of her work and life is unsustainable in the long run. From a conservation perspective, the simple fact of her aging wouldn't pose a problem - except Goodall may be the most famous living scientist in the world. She has unparalleled reach to advocate for people, animals and ecosystems. Her profile cannot help but overshadow the institution she founded that bears her name. And that is a problem.

We have to ask ourselves: What will environmental advocacy look like in a world without Jane Goodall?

Our collective love for Goodall is as strong as the first time we beheld her blond ponytail and khaki shorts on the December 1965 cover of *National Geographic*. She's sitting in the background surrounded by green foliage, pen poised over a field notebook, while a half-dozen black chimps groom themselves in the foreground. At 26, Goodall crossed the ocean to visit a friend living in Tanzania (Tanganyeka at the time) and secured a position as secretary for the legendary anthropologist Louis Leakey, whose fossil discoveries in East Africa helped cement the central importance of the African continent to human evolution. Leakey's field work also included studying primates, and he agreed to include Goodall

on his expeditions. Soon she was leading a solo project to watch chimpanzees in Gombe National Park in the country's northwest corner. After four months spent trailing a pack of chimpanzees, Goodall observed her signature breakthrough.

"One of them began to lose his fear [of me]," she says. "That was David Greybeard. And he's the one I saw using stems to fish for termites. Using them as tools, stripping leaves from leafy twigs to make tools. And that was a breakthrough." While not unfathomable today, in the mid-1960s, this had never been seen before. Tool use was thought to be a strictly human practice. It was a triumphant moment.

While Goodall's work and life are often romanticized, the truth is that her findings destroyed many long-held and ultimately untrue beliefs that animals didn't possess emotions or personality and lacked the ability to wield rudimentary tools. Her discoveries to the contrary helped redefine our perception of humanity, detailed in her seminal paper, "Tool-Using and Aimed Throwing in a Community of Free-Living Chimpanzees," published in a 1964 edition of *Nature*.

At the time, Goodall was not interested in the spotlight. Yet she knew enough to know that the images captured by Hugo van Lawick, the photographer and videographer sent by the National Geographic Society to record her work, would be useful. As an untrained woman, leading experts were skeptical of the veracity of her work. "They thought... that I was making this up. That I had trained the chimps," Goodall says, "which would have been really something because they wouldn't come anywhere near me." Following the 1965 issue with Goodall emblazoned between the prestigious yellow bars of *NatGeo's* cover, the resulting outpouring of media interest brought global attention to her projects – and, with it, funding. (The mythologizing of Goodall's work also traces its roots to the publication of this iconic magazine cover.)

Despite the newfound attention, Goodall continued her work in the jungle as scientific director of the Gombe Stream Research Centre until 1986, the year she attended what became a fateful conference she helped organize

in Chicago on understanding chimpanzees. It was here she came to realize that primates were under serious threat all across Africa. For the sake of the chimps, she embraced the role of advocate with the force of what was, undoubtedly, the Jane Goodall brand.

Her advocacy work began with wildlife awareness weeks in six different countries in Africa. Looking out an airplane window during her travels, Goodall caught sight of what was left of Gombe Stream National Park. Where once the jungle stretched thick and green across the horizon, all that remained was a small patch surrounded by barren hills. "It hit me," Goodall says, that "if we don't help the people, we can't even try to save the chimps." Since then, her advocacy morphed into the Jane Goodall Institute with branches around the world to promote conservation science, the protection and research of great apes, women's health and reproductive rights and sustainable livelihoods. In addition, Goodall started Roots and Shoots, a youth-oriented conservation program that operates in 50 countries.

"I've never, ever felt like burning out."

Andria Teather is a powerful woman. Her dark, shoulder-length hair brushes the deep orange-red of her shoulder-padded blazer as she sits across from me. Teather, CEO of the Jane Goodall Institute of Canada, is friendly and generous with her time. But she will suffer no fools – it's not in her nature. Teather spent years climbing the corporate ladder at TD Canada Trust, where at one point in time she was the National Manager of the TD Friends of the Environment Foundation. Unlike many of her peers in the eNGO field, Teather is not a bleeding heart, but a commander.

"I think not-for-profit needs many more people with a business mind, and a heart for the cause," she tells me. "You're not going to be successful in this role unless you believe in the cause. But I will tell you – I have never used my business skills more than I have in this job."

The Canadian branch of the Jane Goodall Institute operates a multitude of programs to connect Canadians with global work on chimpanzees, maternal well-being and forest health across the African continent. They've expanded into areas like maternal health as a result of those first flights Goodall took over Gombe Stream National Park, where the deep connections between human well-being and the fate of the chimps became clear. Give women the chance to control their reproduction and fewer children may be born, she might have thought, which would then decrease

pressure on forest for charcoal and hunting.

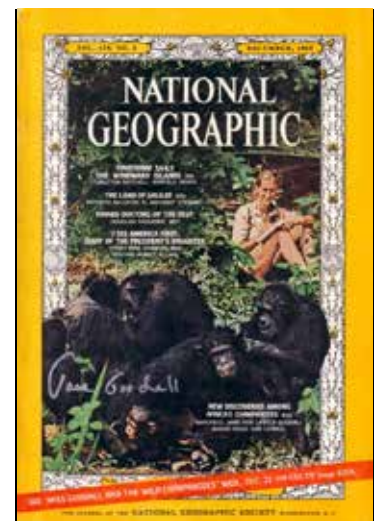
And here at home, the Institute recently launched an exchange program for Indigenous youth to travel to Uganda to experience the forest industry, learn forestry skills and bring relevant conservation knowledge back to communities across Canada. It's about arming these youth with much-needed skills to pursue careers in forestry upon their return, equipped with a solid understanding of global development.

The organization, staffed with just 12 people, consistently punches above its weight, taking on multinational projects with a holistic approach to both human and conservation needs. "I've worked for five different not-for-profit organizations," Teather says, and the Institute possesses the most compassionate but efficient team she's ever worked with.

Yet even with a corporate mind like Teather's at the helm, this small but mighty organization faces a significant challenge being heard over the near-constant adoration of their founder. "We've got a brand to die for [and] we've got Jane Goodall in our organization name. That's really great," Teather says. But even organizations familiar with the Institute as a separate entity from Goodall herself typically place the founder and her exploits on a pedestal. "Jane knows this," Teather says. "We need to start making people understand that there is a Jane Goodall Institute in this country. And they need to understand that there is work being done. Really, really valuable work."

Admittedly, it's hard to see past the romantic image of a young woman handing a chimpanzee a banana in the jungle in 1962. And while Goodall has embraced this role and its associated branding for the sake of her mission to save the chimpanzees, it's time for everyone – even me – to begin looking ahead with as much excitement and awe as we've looked to the past. Who, I wonder, will be the next young female scientist, inspired by Goodall's verve and passion, to be immortalized between the yellow lines of National Geographic?

"I've never, ever felt like



*Jane Goodall's iconic 1965
National Geographic cover*

burning out. It would just be losing respect for oneself,” Goodall tells me in her hotel room, our time together winding down. “You’ve never felt burned out?” I ask. “I haven’t so far, and I’m 85, so probably won’t now,” she replies. “The time will come when my body says, ‘No, you can’t travel 300 days a year anymore.’ Then I will do more writing.”

One day, whether we like it or not, Goodall will no longer have the energy to rally the world to save itself. And on that day, the Jane Goodall training wheels will be removed from our personal environmental advocacy. It will soon no longer be enough to admire Goodall the scientist, the advocate, the person, so much as we must truly emulate her if we are to survive as a species.

Goodall doesn’t plan on slowing down anytime soon.

She still takes a shot of whisky after every presentation to honour her mother. As you read this, Goodall is likely en route to another presentation, another distinguished luncheon, another interview to spread awareness and do her part for the planet. But when Jane is gone, how will we magnify and multiply the impact of her life’s work? Are we ready to let her words move from our hearts to our hands?

AJ

Leah Gerber has always been pretty nosy. Sometimes she still has trouble distinguishing between being curious and being rude. She loves exploring Canada's nooks and crannies, especially on a bicycle. Her goal is to tell stories, visually and with words, that inspire change in our world, even just a little.

Hands-On: Outdoor Education

Jane Goodall appeared on the cover of AJ’s 2014 Education issue, which explored the value of getting an environmental education, and the incredible leadership of students in the environmental movement. The issue dug into the importance of education in fostering a sense of connection to others and to the planet.

These reflections seem just as relevant today, as we start to contend with what the upcoming school year will look like in the aftermath of the first wave of the Covid19 pandemic. In these complex times, this sense of connection is more important than ever.

As we hurry to return to normal as quickly as we can, educational practitioners across the country have been calling for an overhaul of the education system, moving classrooms outdoors and toward ‘forest school teaching.’ This idea of outdoor education is becoming increasingly popular amid the Covid-19 physical distancing restrictions, since the risk of transmission outdoors is much lower.

But this concept was becoming increasingly popular even before the era of physical distancing. Numerous studies have confirmed a positive correlation between a child’s willingness to conserve biodiversity and increased direct contact with natural spaces. In other words, forming a deep, emotional connection with nature at an early age increases the likeliness for that individual to advocate for the environment later in life.

Outdoor-based learning is also extremely beneficial in the mental wellbeing and cognitive development of children says Pat Andrews, Facilitator at the Child and Nature Alliance Canada and Director of Natural Pathways Learning Centre. She has found that with an increased ability in risk taking and exposure to natural spaces, children in the program are much more confident, self sufficient and demonstrate higher levels of self esteem.

“There’s all kinds of problem solving, teamwork and interpersonal relationship building,” she explained, “And within that, mental health and well being? You’re out in nature, you’re breathing in natural air, your fingers are in the soil, your body is moving through space, you’re planning, you’re balancing on things... connecting the dots between your relationship with the natural world and our

impact as humans on the earth.”

As we move closer to a post coronavirus world, we now have the opportunity to decide how we choose to rebuild. Forest school not only presents a viable way to teach our children how to peacefully coexist with nature in the present but fosters a generation of adults who are more likely to take care of our planet in the future.

Read the full article online at <https://www.alternativesjournal.ca/sustainable-living/woods>



Alexandra Scaman

Ally completed her Bachelor of Science from the University of Windsor with Honours in Environmental Studies, where she concentrated in Resource Management and was actively involved in undergraduate research. She is currently pursuing a Masters degree in Environment and Sustainability at Western University. Outside of academia, she enjoys hiking, camping and spending her summers on the beach in Prince Edward Island

Dazzling music. Bright ideas.
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Hillside
Festival

Hillside Inside
Feb 5–7, 2021
Guelph, Ontario

Hillside Festival
July 23–25, 2021
Guelph Lake Island



Carbon
neutral
in 2019

15

environmental awards,
including the Clearwater Award
for Environmental Stewardship and
Public Leadership in
Sustainability

25

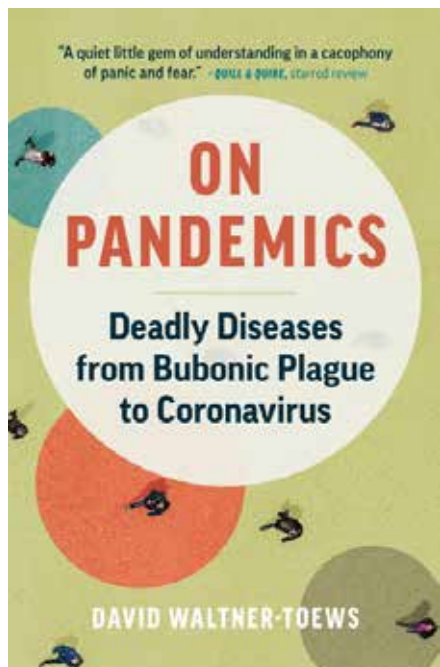
festival awards in the last 10 years,
including Best Small Music Festival
in Canada (2016, 2019) and Best
Children's Programming (2016),
Canadian Music Week

hillsidefestival.ca

On Pandemics:

Deadly Diseases from Bubonic Plague to Coronavirus

Understanding pandemics, the relationship between humans and animals, and the interconnected nature of our world.



One of the important things that the Covid19 pandemic has taught us collectively is that even our most advanced scientific measurements cannot provide all the answers, there will always be uncertainty. Rather than seeking to provide conclusive answers, *On Pandemics* seeks to promote an understanding of how pandemics emerge through a complex combination of social, economic and ecological patterns.

Most infectious diseases are animal diseases that jump to humans. Looking at some of the most infamous epidemics and pandemics in human history, from the bubonic plague, to Lyme disease, to influenza and Ebola, David Waltner-Toews examines how the emergence of these diseases is related to the way


people interact with our environment, arguing that our approach to disease prevention must be one of “global solidarity and keen, careful ecological awareness.”

Drawing on his work as an epidemiologist and veterinarian, but also as a poet and author of fiction, Waltner-Toews not only clearly outlines the science of zoonoses (diseases which jump from animals to humans), but also how economies of scale, the destruction of natural environments, climate change, and social injustices create conditions ripe for the development of infectious diseases.

Using this interconnected approach, the author explains the development of various infectious diseases, showing for instance how the Black Death in the 14th century was the product of a web of complex factors. Globally connected trade networks established during the Mongol empire and massive population growth in Europe, combined with changes in climate which made Europe wetter, converged to create the perfect conditions for the bubonic plague to devastate the continent. Highlighting more recent outbreaks of the plague in Tanzania and India, Waltner-Toews delivers the important reminder that “there is no non-pandemic phase in our future.”

Through each epidemic or plague covered, the book weaves a compelling narrative exploring how past pandemics continue to affect the present, and

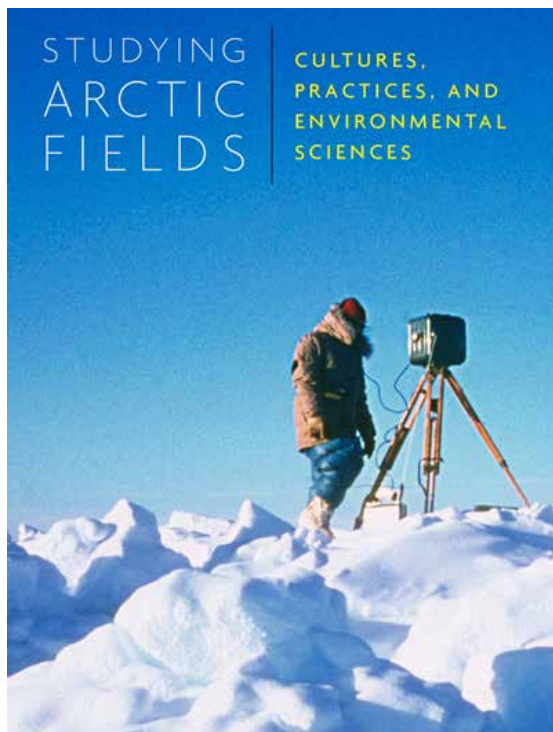
revealing how human interactions with our environment are often the root causes of zoonoses. These reflections underline the necessity of exploring diseases from different angles. To truly understand zoonoses and human diseases, Waltner-Toews argues that a broad collaboration between people from all backgrounds, from historians to social activists to epidemiologists is necessary. We must look not only at the obvious factors like public health infrastructure, but also at agricultural systems, gender equality and global warming.

On Pandemics offers a thoughtful and measured look at what we can learn from pandemics of the past, by looking at disease control and prevention holistically. Even as it delivers the unwanted truth that “we have always lived pandemics and always will,” the book is ultimately reassuring. Waltner-Toews path to minimizing emergencies in the long run is centred on building a healthier more just world for people and the planet. “We are each other’s peripheral vision,” he says, and it is by working together to develop a deeper understanding of our interconnectedness that we will get through our current crisis, and the inevitable next ones too. 

Mimi Shaftoe is in her fourth year of Conflict studies at the University of Ottawa. She's passionate about climate and environmental justice, and loves exploring new places.

ICE FIELD OF DREAMS

Outsider Richard Powell peers behind the curtain at a research support base in the Canadian High Arctic.



The Polar Continental Shelf Program (PCSP) is vital to scientific endeavours in the Canadian High Arctic, providing logistics support to remote research on topics ranging from polar bear populations to permafrost thaw. Yet despite their active support in over 160 Arctic science and research projects last year, PCSP's national profile remains low.

Even as a researcher in Nunavut with Carleton University since 2015, I had never interacted with the program until March 2018 when I visited their logistics hub in Ottawa in a cavernous warehouse. As we sorted and tagged parkas and snow boots, I casually mentioned it was my first visit. One project manager, Jean-Philippe, leaned conspiratorially over a heap of snow goggles and asked, "Want to see something cool?"

We walked down aisles filled with impeccably organized camping supplies, safety gear, power tools and communications equipment. Finally, we stood before a row of shelves lined with snowmobiles and all-terrain vehicles ready for transport. My jaw dropped. After years of working

in Iqaluit—admittedly on one of the best-supported research projects in the community—I was accustomed to making do. How much more could we achieve with resources like these? I wondered...

For field scientists, PCSP's mission is invaluable. Budgets and timelines are tight, and having the appropriate gear makes the difference between collecting invaluable data and leaving the field empty-handed. Not to mention intangible challenges like weather-induced idleness or equipment breakdown that scuttle even the best-laid plans.

Enter Richard Powell, a geography professor at the University of Cambridge and a lecturer at the Scott Polar Research Institute. By his own admission Powell is not a scientist and remains an outsider to this insular world. Yet this distance makes his insights into the conduct of Arctic field science, and the interactions between Inuit and Qallunaat (white people), all the more impressive.

Powell's book *Studying Arctic Fields* perfectly captures the practical and emotional challenges faced by researchers and base staff, underlining the complex relationships between citizens, government and the northern environment.

Although Powell's observations were made around 2001 in Resolute they could easily have come today. All the tropes remain true: unprepared scientists who rely on the goodwill of northerners (I was very guilty of this during my first field season); a lack of meaningful interaction between southern academics and northern residents; unresolved tensions around the ownership and practice of science in Nunavut.

Field scientists and others with a passion for the North will surely find the book interesting, but its greatest value may be to humanities or social science readers. Its observations are astute and subtle, and Powell makes a strong case for the ethnographic observation of field science.

Yet this is also one of the book's great flaws. Powell's writing style is too academic for readers unfamiliar with the literature of ethnographic research. It's verbose, filled with long paragraphs rich in disciplinary jargon.

One of Powell's central arguments, for example, is how "a good field person" is narrowly defined by a senior field researcher. This categorization-by-scientific-elite lays the groundwork for a restrictive power dynamic. An

important observation, but one that's undermined because "temperance," a term Powell uses often, is never defined. How easy it would have been to explain that a "culture of temperance," in this context, refers to field scientists setting aside their desires for adventure to conduct methodical work.

He's mostly right in arguing that scientists are taught that adventure is what happens when experiments go wrong. But research is never so binary in the Arctic. Between harsh conditions and logistical challenges, strategies are often dashed. Experiments go wrong. And that's when an adventurous spirit is needed to make hard choices about how to collect the necessary data.

But "temperance" isn't the only signifier used in determining "good" field people. Disturbingly, race, gender and personality remain troubling markers too often relied on to designate some researchers "good" and others, presumably, "bad." The result is a hierarchy of afforded respect that favours old white men. This condition is not restricted to Arctic research by any means, and it is gradually improving. But nearly two decades after Powell's work, an old boy's club remains in many Arctic research networks, a bug in the system that current and future scientists must eradicate.

Powell also uses extensive archival review to provide historical context for his observations and the postwar, Cold War thinking that permeated much Arctic research under [Prime Minister John Diefenbaker](#) and his "new vision" for Canada. "[We intend to carry out the legislative programme of Arctic research, to develop Arctic routes, to develop those vast hidden resources,](#)" he said, an attitude carried forward into the 21st Century

by Prime Minister Stephen Harper and his Arctic sovereignty obsession. Research as a driver of nationalist agendas still echoes in the North. [AV](#)

Keegan Smith is a field research technician with the Global Water Futures research program. When he's not outside for work or pleasure (camping, hiking, cross-country skiing...), his biggest interest is writing on science and the environment, especially in the Canadian Arctic.



PHOTO BY PIXABAY

BSc Four year degree and Honours in Environmental Science

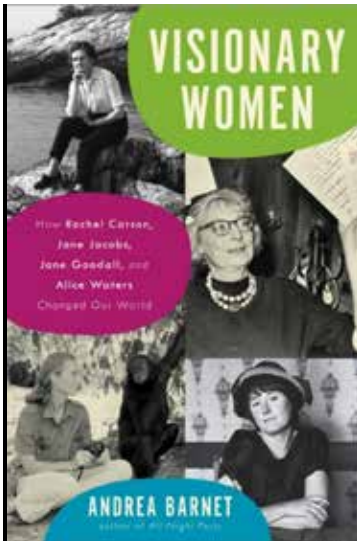
The Environmental Science program brings together the study of biology, chemistry, earth sciences and geography to enable its graduates to address complex and multidisciplinary environmental and conservation problems.

BSc Three year degree and Four year Honours in Interdisciplinary Science and Practice

The BSc in Interdisciplinary Science and Practice integrates concepts and knowledge from different science disciplines to be applied to real world problems through local and global perspectives. Program graduates will be well prepared to balance specialized technical knowledge with the transferable skills of critical thinking and problem solving, teamwork and science communication.



Visionary Women



Visionary Women is the true tale of dedication, hardship and triumph that leads to profound social change, catalyzed by four heroines who stood at the frontlines of the 1960s counterculture movement. Marine biologist Rachel Carson, urbanist Jane Jacobs, primatologist Jane Goodall and food activist Alice Waters were not connected by generation, field, or social circle, but by a self-inspired determination to challenge conventional norms at the heart of corporate America and its disregard for nature.

Seasoned journalist and author Andrea Barnet presents a thoroughly researched and eloquent group biography, transporting readers across time and space to stand beside Carson on the salty shores of Beaufort, North Carolina, with Jacobs on the lively streets of Greenwich Village, alongside Goodall in the canopied rainforests of Tanzania and near Waters in the ancient towns of southern France. Crucially, so as to tie these women and their work, Barnet weaves together prominent themes within each woman's life representing some of the greatest social trials of the mid-twentieth century.

Postwar America was shaped by a reductive scientific and technological optimism, a way of thinking that, in no

small part, accelerated the potentially devastating nuclear arms race that characterized the Cold War. At its core stood automation, standardization and industrialization, methods of production that operated with little consideration of the natural world. Although concepts of unity and connection at this time threatened the military-industrial complex and its fixation on science and technology in pursuit of the "American Dream," Carson, Jacobs, Goodall and Waters, in their differing ways, all intuitively grasped the interconnected fabric of life on Earth. "The hubris implicit in attempting to control nature, they warned, held within it the potential to still all life," Barnet writes. The messages emanating from all

Carson, Jacobs, Goodall and Waters, in their differing ways, all intuitively grasped the interconnected fabric of life on Earth.

these women, regardless of how they devoted their lives, formed the basis for both ecology and systems thinking, insights and principles that, at the time, had no bearing on the scientific narratives emerging from Allied victories in the Second World War. In the haze of celebratory growth that followed such bloodshed and devastation, the exploitation of finite natural resources barely registered.

Constricting gender roles, meanwhile, were never far from society's thin skin at the time. Prospects for women were restricted largely to the home, though volunteer work or a teaching degree as a means of leaving the house was not off the table – so long as that table was ready for dinner when a husband returned home. Some even suggested a female's most vital postwar role was to restore her husband's fragile confidence, shaken from discovering that women easily completed work traditionally done by men while away

at war. Women in the 1950s and 1960s (and, sadly, well beyond this timeframe), Barnet amusingly notes, were "expected to make coffee and not decisions."

Yet in the face of male-dominated power, industrial specialization and corporate greed, Barnet's heroines inspired a radical shift in consciousness in the American public. Poisoning the natural environment, the ill-effects of mass-produced housing and gentrification, the commodification of wild animals and the industrialization of food were issues that spoke to the potential of a sustainable, peaceful and equitable life. These women, in vastly differing but connected ways, demanded that the personal become political and in so doing built

the foundation on which the 1960s counterculture was established – and has since endured.

Driven by a passion for their work and an intense curiosity to learn, "all understood that people will only protect what they love," Barnet writes, and that "changing minds meant touching hearts." Their work continues to inspire and motivate, showing the power of a single transformative voice. All of us, the sons and daughters of the movements initiated by these powerful women, still benefit from their tireless work and vision for a better world. **AV**

Sophie Sanniti is a PhD Student in Social and Ecological Sustainability at the University of Waterloo and Vice President of Research & Education for the Canadian Society for Ecological Economics (CANSEE). Her research explores the intersections of ecological economics, critical (eco)feminism, and household sustainability.

THE HILLSIDE INTERVIEWS

Carmanah's Laura Mitic and Pat Ferguson get real about environmental hypocrisy and the adventures and challenges of driving a vegetable oil powered car.



Victoria band Carmanah's second album, Iris, is set to be released in Fall 2020.

One of the many unfortunate effects of the Covid19 pandemic is the postponing of this year's Hillside festival until 2021. This dreamy festival takes place every year on Guelph Lake Island, and the incredible performances are set against the backdrop of sunsets over the water. On top of all this, Hillside is a leader in festival sustainability, with a reusable dish program, a solar powered stage and new sustainability initiatives being unveiled every year. Needless to say, the festival is the highlight of every summer at Alternatives Media, and to tide us over until the excitement of next year, A\J staff have been reflecting on some of last year's best moments. The A\J team had the chance to interview

some fantastic artists at Hillside 2019, and British Colombian folk band Carmanah was among them.

The band hails from Victoria, BC and have made headlines for traveling across the country in a car powered by vegetable oil.

We caught up with lead vocalist Laura Mitic and guitarist Pat Ferguson while they were relaxing in the performers' area post complimentary massage, and pre-performance.

AJ: How's Hillside going so far?

Laura: Awesome! We got shuttled in and immediately it was like, now you get to go on this boat, this little river yacht and they'll take you to the dock, and then we were welcomed with dinner. Last night was so fun! It was a great line up, someone is choosing the artists very well. It's been a dream and I'm excited to perform today.

AJ: What's behind the name Carmanah?

Laura: Carmanah is a provincial park on Vancouver Island, which is an ancient forest. It's old growth and it's never been

logged before. It's a magical place and has some of the oldest Sitka Spruce trees in the world, and other varieties of trees in the rainforest that are just massive. You hold hands with a bunch of friends and you can barely get around them, they are absolute giants.

A couple years ago we were going through different names. We knew we wanted something that represented where we were from, so we tossed around a bunch of different names of places and landmarks, and we settled on Carmanah. Shallowly, mostly because it was a beautiful spot and a beautiful name, but as the years have gone by it's been amazing to hear the stories that have come out of that place too, because it was going to be logged in the late 80s and people had to stand up to protect it. So a lot of environmentalists, activists and people from the Indigenous community in that area were total leaders and stuck up for this incredible area of land and saved it.

A\J: What is it that drives you to create music?

Laura: It's really fun. The food is great! The pay is low but the treatment makes up for it.

Pat: Laura does most of the songwriting, so I can't speak for that but, there are a couple of layers. Performing is getting a connection with an audience which is very special, and writing songs is a process that comes from the heart and is very fulfilling as well.

Laura: I think we also like each other which is nice. If you're getting to hang out with people that you like and you're going on tours and trips, it's a really nice way to spend your time. And you get to meet really wonderful people too. And also educational, we do presentations as well for school students.

A\J: Can you tell me a little bit more about that?

Pat: It's called the Jellyfish project. We started working with them a few years ago, maybe 5 years ago now. It started out as a volunteer experience and now

we get funding through an organization called Art Starts, which places talent and presenters in schools.

So we bring all our gear including PA and laptop, and set up our equipment. We play a few songs to hook the kids and get them stimulated, and then we deliver a presentation with slides and videos on ocean health, climate change, and sustainability and try to focus on solutions to a lot of the problems that we're facing.

Laura: We've done somewhere around 100 schools, and the Jellyfish project in total has reached over 100,000 students. Another band started it off before us and took it on a cross-Canada tour. Now Pat and I have taken the torch and have been to about 100 schools. The closest one to here was in Windsor, at a big environmental youth conference.

Pat: It was pretty amazing. It wasn't a cheap event to put on, maybe 10,000 dollars or so and they fed all the kids. But they said, it doesn't matter how expensive that day is because they save so much money throughout the year due to the school board's environmental initiatives. It's really inspiring.

A\J: Speaking of sustainability, could you tell me a bit more about your vegetable oil powered car?

Pat: Yeah! It's a dodge ram, 1997 dodge ram. It's like the toughest engine ever put in a passenger vehicle, and that's why I bought the truck because it was my first time converting a truck to run on it so I knew there'd be the odd mistake, so it was best to try it out for the first time with a bulletproof engine.

It's a two tank system- anyways sometimes I get too science-y or trades-y about it but, the long and the short of it is that we pick up used veggie oil from a burger joint in town, take it home, and pour it into a big barrel to settle it. We usually carry enough to do

a whole tour, we've carried enough to go almost 6000 km, so we'll have about 850 litres in the back of the truck.

Laura: It's crazy! We can barely fit our musical instruments in sometimes because there's so much veggie oil that we bring to do these long distances.

Pat: I'd show you a picture but we also have a 40 foot greyhound bus now that runs on veggie oil. It's being built on the inside right now. Laura and I are a couple and it's going to be our home and tour bus.

A\J: So do you pick up the veggie oil from one specific place?

Laura: Sort of! The one burger joint gives us a lot of veggie oil, and the oil is nice and clean too, because they aren't reusing the oil quite as much as other places, so it's nicer for the engine. They change it every two days.

Pat: Some restaurants cheap out and leave the oil for like a week until it's black, which wouldn't be so smooth on the engine.

Laura: But then sometimes we are on the road for a long time we have to source it out, so you're in a back alley looking for veggie oil somewhere, and it's like what are those punk ass kids doing!

Pat: It's an adventure.

A\J: So what motivated you to start doing that?

Pat: Money.

Laura: Yeah, it's free fuel.

Pat: And hypocrisy. Because we talk about making change and being more environmentally friendly, but everyone has a certain amount of hypocrisy about them so it feels good to try and combat it and try to do something about it.

Laura: Because you know, a big part of being a musician is you have to put in the kilometres whether it's in the air or on the ground, and at least this way



PHOTO BY JESSICA BURMAN

when we are on the ground, we can be a little more environmentally friendly about it, and on our musician wallet it's way gentler as well.

Pat: And it's fun. It's a lifestyle choice.

Laura: It smells like french fries!

Pat: We were lucky enough to get massages today in the hillside musician



PHOTO BY JESSICA BURMAN

tent, but this is what my skin normally feels like 'cause I'm covered in vegetable oil.

Laura: Yeah we've got this natural greasy shine to us at all times.

AJ: This year's theme at Hillside Festival was "stories that need to be told". What is the story that you feel needs to be told?

Laura: I sat for a while thinking after getting that question from the festival, that is a big and general question. It's a hard thing to answer in one sentence. So I brought up like I said for our namesake, the fact that a lot of our ancient forests are still being logged or are under threat of being logged. Including the Carmanah Walbran which sometimes still comes up every once and a while as being at risk of being logged.

I just shared my thoughts on how, and it goes back to the hypocrisy, everyone can preach about the climate changing, but I still feel like as humans we're doing so much harm to the planet and we see ourselves as separate from the planet. We don't even see ourselves as animals anymore, and so by harming the environment we are harming ourselves and I think that conversations like that

need to be at the forefront of every single decision that we make, especially right now.

Pat: I think it's also important to recognize the importance of First Nations in environmental activism. They've literally been the saving grace in this fight, and are the only people who are going to make a difference. They are at the forefront of this fight, so power to them. May we be allies and figure this shit out.

Allies, and brothers and sisters too, because genocide is what they went through. A genocide. So we have lots of shit to figure out as a country and as people.

AJ: When you're making music and writing music, how do you bring these kinds of themes into it. Is that something you feel you have a responsibility to do as a musician?

Laura: I think when I sit down with my instrument, there's always something that's on my mind to do with the environment or society right now and how we're operating that'll be in the front of my brain. I feel like if I'm feeling emotional it's usually because of some of the stuff we've been chatting about. The emotions often turn into creativity, if



PHOTO BY JESSICA BURMAN

the timing is right. So a lot of our songs tend to be about environmental issues or society. And then sometimes they're just about love too because that's a big part of everything, isn't it.

A\J: What do you hope people take away from a show at the end of listening to you play?

Laura: Happiness!

Pat: Peace and fun!

Laura: And some reflection too I'd say, whether it's just musically or maybe it will spark a conversation too somewhere that's always nice. Hopefully they loved the music.

Pat: Hopefully they'll feel like buying a record. See there's some hypocrisy right there. Vinyl is stupid, vinyl is an archaic medium that is heavy and hard to transport and made of plastic, and not recyclable, but we sell them. We've got to make money. But whatever, people treasure art.

Laura: Hungover Pat is just a little edgier than not hungover pat.

Pat: I'm not saying this to bring it down, but I don't want it to seem all bubblegum and like we're perfect. We also struggle with these decisions.

A\J: No for sure, even a festival like Hillside who've been incorporating sustainable practices ever since they started, they never stop trying to find new ways to get better. It's important to be aware of your impacts and then when alternatives emerge you can start to follow them.

Pat: Absolutely, festivals can be an educational facility.


Laura: It's tough too, I mean we had to fly here for this, and I find it harder and harder to get on an airplane and just sit there and see the big engine starting up and knowing that our footprint is so large when we get on a plane.

Pat: According to some carbon footprint calculations, one flight, or your portion of one flight is the amount of fuel it takes to drive a car around for an entire year.

A\J: Do you have anything else you'd like to leave readers with?

Pat: Well, amidst my negativity or hypocrisy, I'm going to go back to one of your earlier questions, about why we make music. Music is a celebration, and it's important to celebrate. We're only here for a short blip of time on this planet, so try to celebrate and don't forget to have fun!

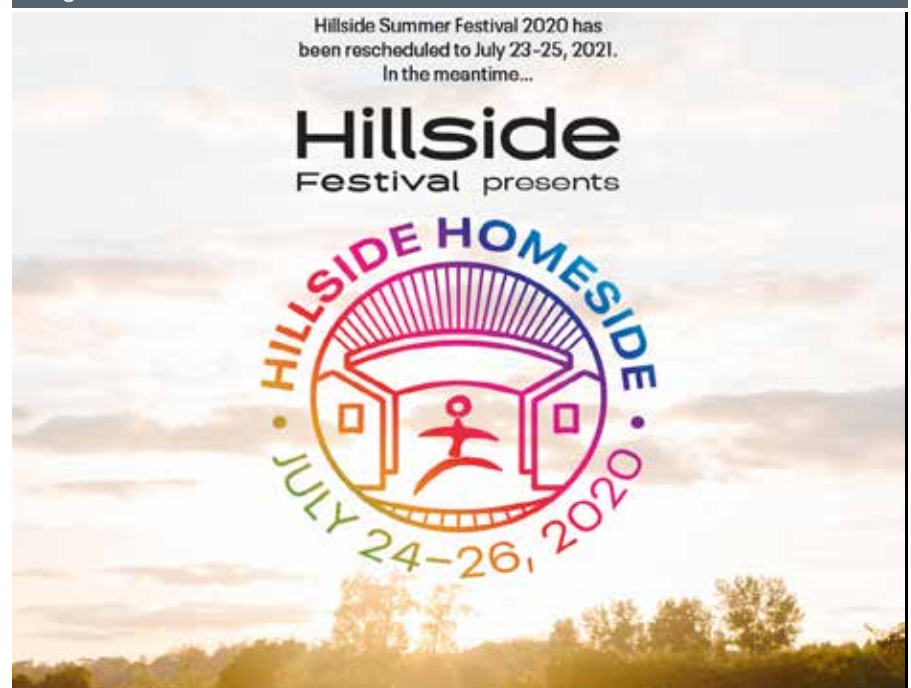
Laura: Hopefully check out the tunes!

You can find Carmanah on spotify, youtube, apple music, on their website, and at your local independent record store! 



Mimi Shaftoe is in her fourth year of Conflict studies at the University of Ottawa. She's passionate about climate and environmental justice, and loves exploring new places.

While Hillside was postponed this year, the festival created an incredible online festival, Hillside Homeside. Complete with performances, workshops, a drum and dance area, an online artisan market, and even a food section where attendees could cook along with food vendors, this year's festival was a testament to the commitment and dedication of both the Hillside staff and community who rallied together to create an amazing virtual experience. The countdown to Hillside 2021 begins now!



Protecting the Investment in Change



INTRODUCING: Dollars and Sense

What can a business scholar bring to the societal debate pertaining to the environment? The answer might not always be obvious, even for the author of these lines. I generally believe that businesses can marry environmental management to the economic bottom line. That premise has been central to my research and teaching over the past 15 years. I also believe that generally, what is taught in business schools can provide insights not just for business managers but also for public administrators and policy makers. Topics like operations management, consumer behavior, or strategic human resources are just a few examples that can be fruitful beyond business organizations. Hence, this recurring column will be a commentary building on business or economic concepts on the issue theme or a contemporary matter.

This issue on 'investing in change' provides a fertile ground for the first column in this series. The management of change has become a central part of many management programs around the world. That is well warranted because, fundamentally, numerous orga-

nizations have embarked on 'change' – and were unsuccessful in the long run. The simple explanation is that all changes, environment-based or otherwise, come with one inherent challenge: ensuring that the transformation being made is sustained over time after the implementation is completed. This is true for businesses – in fact, it is true for all organizations including local governments and non-profits.

The research on the topic is vast and guidelines to have effective change are numerous. While many aspects of a plan for change can contribute to its success, I'd like to briefly present a couple that I particularly value.

Too many times, I've witnessed or heard stories where an organization's managers advocated for changes but were not, in practice, acting accordingly. The famous walk the talk is critical to get the employees and other stakeholders to adopt the desired change and to persevere through time with it. A business owner preaching for a reduction in the carbon footprint in their organization cannot come to work every day in their massive gas-guzzling SUV. When faced with such a contradicting signal, employees simply question the owner's inner motive and see the energy-saving procedures to reduce the carbon footprint as a way to boost profits and nothing else.

I've also noticed throughout my consulting assignments, discussions with practitioners and the many business cases I've looked at, that top managers

regularly forget to realign the organization incentives and the compensation system. Often, the existing work appraisal scheme and rewards are not lined up with the desired outcome of the change being implemented. For example, companies driven for on-time delivery or low costs might reward middle managers on performance indicators which can be at odds with either a stronger environmental strategy or the implementation of a safety management system. While the results of a new change can be encouraging in the short run, middle managers quickly experience a dilemma between how their work is assessed and the overall outcome sought by the change.

There are many elements to consider when making organizational change, and I certainly encourage the readers to consult the abundant literature on the topic. In my opinion, the elements present here are often overlooked and sometimes lead to the short term gains from a change vanishing like smoke out of a stack. After all, when so much effort is put into a change, it is worth going the extra mile to protect that investment... **AV**

Stephan Vachon is the Director of Western University's Centre for Environment and Sustainability and the Chair of the Masters of Environmental and Sustainability. He is also an Associate Professor in Operations Management at the Ivey Business School.

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