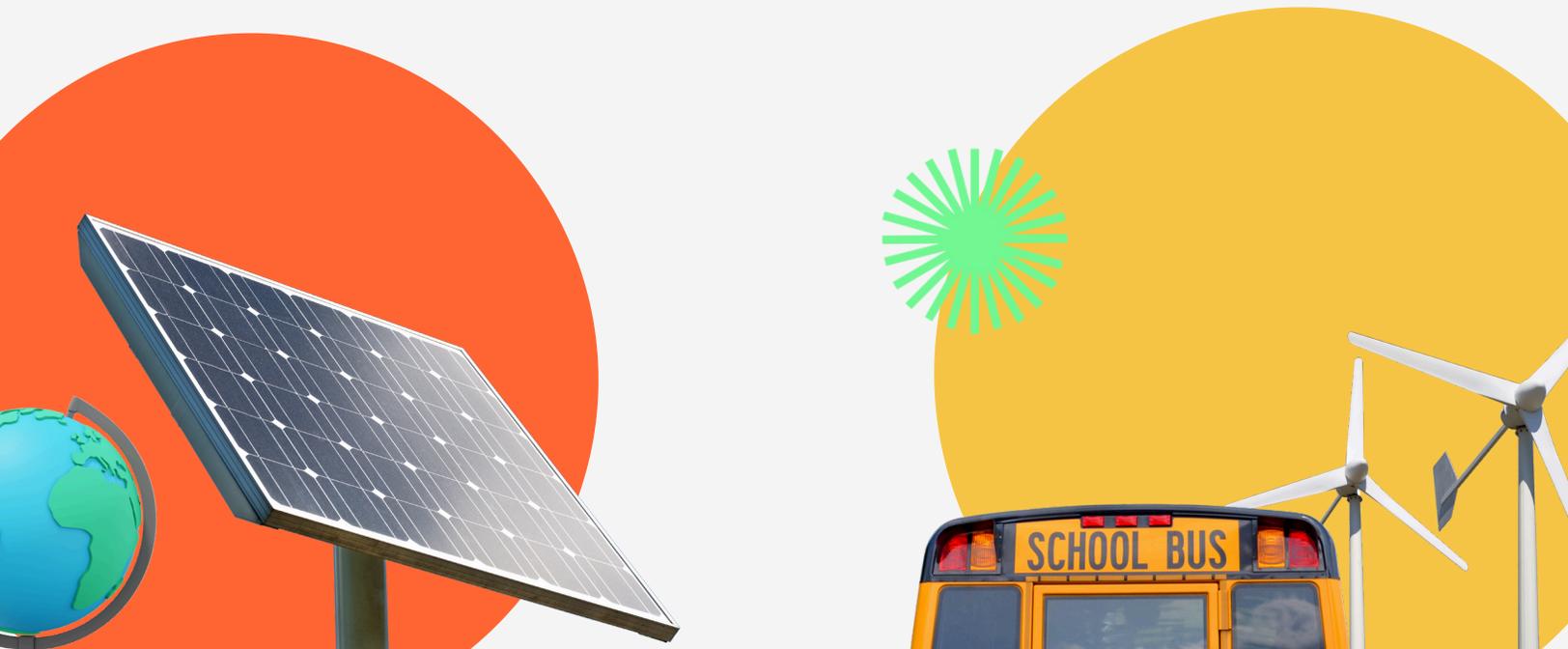




Impact Report

2024





FES

A project of Finance
Engage Sustain (FES)

Acknowledgements

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www.fesplanet.org
www.nowfornetzero.org

Our Funders

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Environment and
Climate Change Canada

Environnement et
Changement climatique Canada



FES operates all throughout Turtle Island and is headquartered in the traditional territories of many nations, including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples.

**For the purposes of this report,
we refer to Turtle Island as
"Canada."**



Executive Summary

The N:OW for Net-Zero program, launched in 2023 by Finance Engage Sustain (FES), empowers Canadian students and educators to engage in climate action through youth-driven emissions reduction initiatives. The program includes three sub-programs—Curriculum for Net-Zero, Solutions for Net-Zero, and Funding for Net-Zero—aimed at supporting student-led emissions reduction projects, and integrating climate action into school communities across Canada.

In its inaugural year of 2023-2024, the N:OW for Net-Zero program awarded \$229,400 in grants to 21 emissions reduction projects across Canada, directly involving 485 students and educators, and indirectly engaging over 4,000 community members. Projects ranged from renewable energy installations to sustainable food systems and energy-efficiency retrofits.

The program also focused on enhancing climate literacy, developing 82 curriculum linked, interdisciplinary lesson plans on net-zero solutions. These resources were downloaded over 680 times, and a climate literacy quiz involving over 1,200 students showed significant improvements in their understanding of net-zero concepts.

Outreach efforts engaged over 20,000 stakeholders, generating 52 funding applications totaling \$606,945—particularly from rural, remote, and Indigenous communities. The program emphasized support and accessibility, conducting coaching calls to guide applicants through the process.

The first year of this program led to many lessons learned, resulting from the successes as well as the hurdles faced. The greatest challenges included delays due to bureaucratic school processes, lengthy equipment shipping delays, and the need for enhanced technical support and partnerships to be able to track emissions reduction. It became apparent how important it is to link climate education to broader social and economic issues relevant to students' lives, as well as how much more ambitious projects can be when they are integrated into courses as opposed to extracurriculars.

This first year of the program was an opportunity for the N:OW for Net-Zero team to learn, pivot, adapt, and ultimately try to understand our own position in the climate education space. The project worked to identify and address the key gaps and barriers that schools are currently facing when it comes to climate literacy and experiential learning related to climate change.

Looking ahead, N:OW for Net-Zero will be taking the lessons we learned along the way and applying these to achieve the greatest level of impact possible. Moving forward, N:OW for Net-Zero aims to support the development of Climate Action Plans at school and school board levels, enhance grantees' capacity to measure and report on emissions reductions, and promote the role of tech and trades courses in climate education. The program remains committed to empowering youth and educators to lead Canada's transition to a sustainable, climate-resilient future.

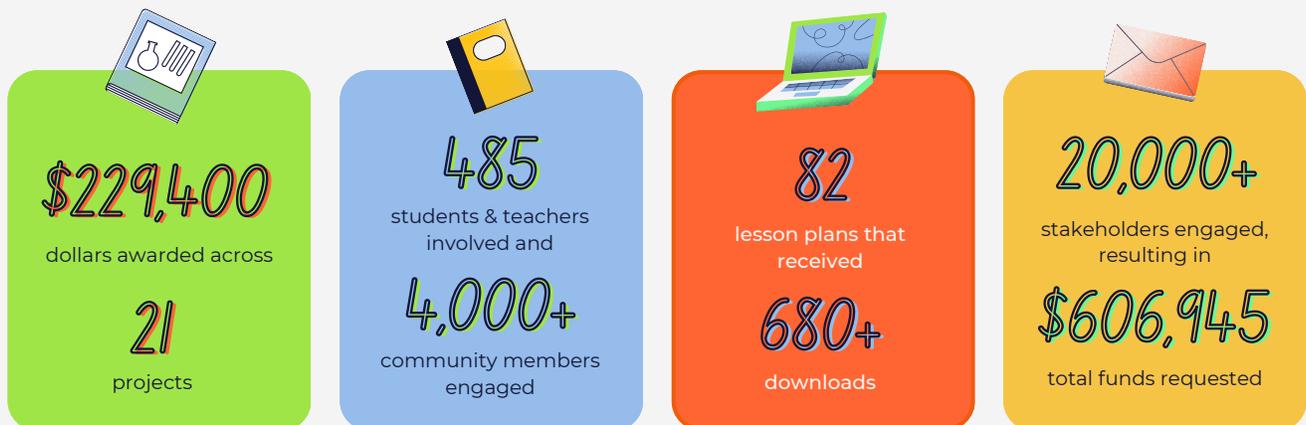


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The Who

Letter from the Program Director, and
Steering Committee members





Letter from Program Director

Dear students, educators, supporters, and allies,

If you love peer-to-peer learning, grassroots initiatives, and youth-led climate action, and are looking for your next casual 50-page read, then I know you will thoroughly enjoy this report.

First, I want to thank you for taking the time to explore this resource. Over the past year, I've realized how often we overlook the importance of pausing to reflect on our climate work. With everyone stretched thin and juggling multiple responsibilities, I truly appreciate the effort it takes to build collaborations and partnerships despite the limited time and resources. I understand how challenging it can be to feel stuck in the trenches of our often under-resourced work, and how difficult it is to find the time to share insights with our peers. Thank you for making it this far!

I am delighted to share our learnings from the past year because building this program from the ground up has been such a rewarding, educational, and impactful experience for our team. I hold so much gratitude and excitement for the communities we had the privilege of supporting. Grantee partners from this inaugural year of N:OW for Net-Zero gave our team so much hope as they not only reimagined sustainable futures for their communities but took local action to signal tangible change. Canadians are facing a poly-crisis of complex intersectional issues like the climate crisis, affordability, housing, and systemic injustices. In the face of all these challenges, we, at FES, dedicate our work to supporting youth because they are the instigators to catalyze culture shifts, mobilize political will, and implement hope-filled solutions to build a more livable future for us all.

It is important to engage everyday Canadians with the concept of net-zero because the skills essential for the transition are already needed in today's workforce. We cannot leave anyone behind in this transition. This program is an opportunity for us to further empower youth with avenues to gain the green collar skills that will prepare them for success in the inevitable global green economy.

This report goes beyond simply listing what deliverables we achieved this year. With this being the first year of the program we wanted to explain how this program came to be, why we took the approaches we did, what worked well, and what didn't. Sharing these insights are critical because we hope that fellow organizations can use this report as a roadmap to build climate and environmental education grant programs of this scale to integrate into their own programming. We'd love for this report to act as the "proof-of-concept" for organizations, educators and students to use in their own pitches to funders and grant applications. The best-case-scenario for us is that our work can be replicated across Canada so even more student-led, project-based, climate education opportunities can be brought to life.

Thank you for your support, engagement, and most importantly, your time. We are excited to work together to collectively strengthen our shared goal of creating a sustainable, fair and prosperous future for all.

With gratitude and hope,

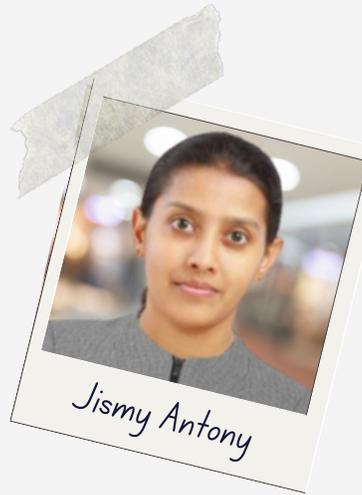
Jessica LeBlanc





Steering Committee Members

The Steering Committee is a mix of educators, students, climate activists, and subject matter experts from various regions across what is currently referred to as Canada. They collectively guide and inform N:OW for Net-Zero's programmatic direction and evaluate grant applications.



Jismy Antony



Cameron Armstrong



Chris DiMarino



Sarah Finder



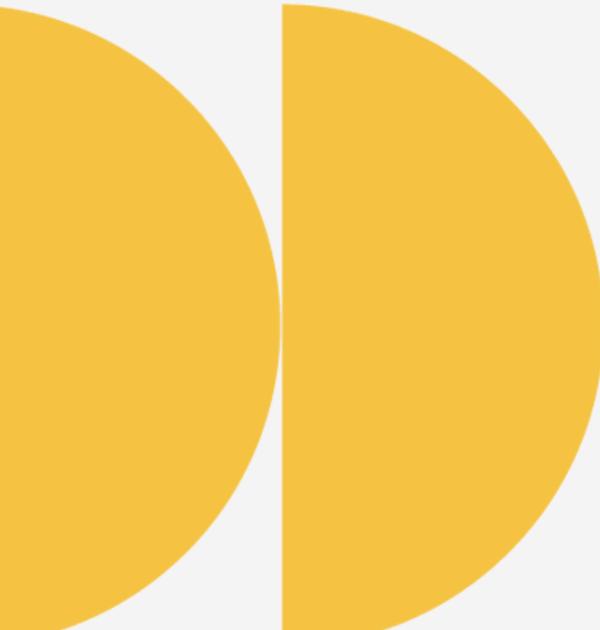
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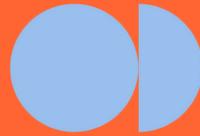


Ainslee MacMillan



Kate Montgomery





The What

What is N:OW for Net-Zero, and our
Challenge, Goals and Mission.



What is N:OW for Net-Zero

N:OW for Net-Zero empowers Canadian students and educators with the resources they need to explore and implement meaningful climate action in pursuit of net-zero.

N:OW for Net-Zero offers three sub-programs, all geared towards supporting Canadian educators and students in reducing GHG emissions in schools and improving climate literacy.



curriculum for net-zero

Free curriculum linked lesson plans and classroom resources on net-zero and climate solutions for Canadian grade 7-12 classrooms.



funding for net-zero

Grants for student-led net-zero projects that will reduce emissions in their community. Available grants anywhere between \$2,500 - \$15,000.



solutions for net-zero

Practical examples of net-zero and climate solutions that can be implemented by students and educators in schools and local communities.

The Net-Zero Challenge

The Challenge

For many Canadians, “net-zero” is climate jargon that feels far removed from our lives. Educators lack the time, tools, and support to deliver climate education in the classroom. Although youth are concerned about the climate crisis and have the potential to be change makers in their communities, they typically struggle to access opportunities or support to practice implementing high-impact solutions. Youth must be educated about net-zero transitions so they have the knowledge and skills they need to be a part of it—rather than getting left behind.

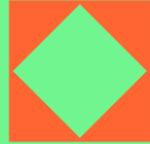
Our Goal

To provide Canadian students and educators with the knowledge, resources, and tools they need to reduce emissions **now**- in their schools, within their communities, and across Canada.

The Mission

To collectively reduce Canadian greenhouse gas (GHG) emissions by increasing net-zero climate literacy and mobilizing action on emission reduction solutions in school communities.





The Why

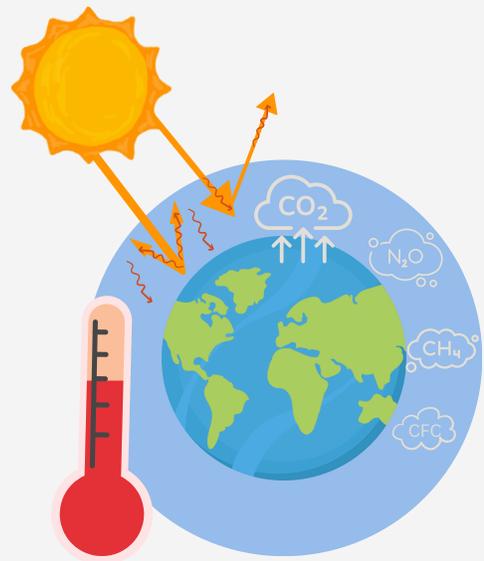
Research that fuelled the work and our
stance on Net-Zero



Why Net-Zero?

The Climate Crisis and 1.5 °C

We are in a climate crisis because there are too many GHGs being emitted into our atmosphere, trapping heat and raising our global temperatures. It is the international scientific consensus that, to prevent the worst harms of the climate crisis, we must limit warming to 1.5 degrees Celsius above pre-industrial levels by 2030.



Net-Zero

To avoid warming of 1.5 °C we have to rapidly reduce human-related emissions and achieve net-zero as soon as possible. To go 'net-zero' means reducing the amount of human-related emissions we produce to as low as possible, and balancing the remaining emissions that we can't reduce by removing them.

We cannot emphasize this enough - we must prioritize adapting the ways we live and working to reduce as much of our emissions as possible. Adapting to reduce emissions at the source must be prioritized over initiatives to remove emissions.

Transitioning to a climate-resilient future through net-zero strategies, requires a complete transformation of our energy, transportation, production and consumption systems. This is necessary to avert the worst consequences of climate change.

There are many different ways we can reduce and remove GHGs. These are the important "green skills" that we want Canadian students to understand and experience. It's important to empower students with these skills so they can be responsible energy consumers and leaders in the transition to a climate resilient society, economy, and planet that needs to happen N:OW.

Net-Zero: An Imperfect Solution

Net-zero refers to the balance between the amount of GHGs we produce and emit into the atmosphere, and the amount that we remove from the atmosphere. When we reach a point where we are adding less emissions than what we are taking away, we reach net-zero. It can be achieved through a combination of emission reduction and emission removal.



Emissions Reduction	Emissions Removal
<p>There are many ways we can reduce emissions. Primarily reducing emissions requires us to adapt and change the ways we live and work to be less polluting.</p>	<p>We cannot reduce all emissions, some are unavoidable. To get to net-zero, we have to remove the emissions that we cannot avoid producing, as a last resort to offset what we put in the atmosphere by taking some out.</p>
Adapting	Offsetting
<p>Most schools in Canada are powered by natural gas or electricity that is made from fossil fuels (coal, oil, natural gas) [SOURCE]. This sort of energy creation produces a lot of greenhouse gases.</p> <p>If a school were to install solar panels they would be adapting the way they power their school. Renewable energy, like solar, produces significantly less GHGs than non-renewable energy from fossil fuels.</p>	<p>Plants and trees naturally remove carbon dioxide from the atmosphere via photosynthesis, and convert it to carbon which they store in wood and soil.</p> <p>If a school knows what its carbon footprint is, they can pay to plant enough trees that will naturally absorb (or “remove”) the amount of carbon and greenhouse gases they emit.</p>

Greenwashing Net-Zero

We can't buy our way out of the climate crisis

We are seeing the term “net-zero” greenwashed by corporations, institutions and individuals for personal, capitalistic interest. Sometimes the word is used as a lie, sometimes it's an empty pledge, and sometimes it's a way to avoid the real issue and continue the harmful ways we operate.

For governments and corporations that are responsible for emitting many

harmful GHGs, the concept of net-zero opens up a loophole for them to exploit.

Instead of having to change the way they operate, or stop their practices that are emitting GHGs, they instead can just focus on buying “offsets”. They can buy /pay for projects that reduce, avoid, or remove emissions elsewhere.

There are a few key problems with this:



They are still emitting many harmful GHGs.



There are flaws, corruption, and harming of nature and Indigenous communities in the offset purchasing and trading markets.



Not all carbon offset projects are equally effective.



Legitimate carbon sequestration projects (ex, planting trees), often still never enough to actually balance to net-zero.



It allows polluting corporations to be eligible for some “climate” funding from investors, banks, and governments.



It distracts us from actually investing in ways to change and adapt our lives and economies to be less harmful for the planet.

At N:OW for Net-Zero we want to call this out, and acknowledge the pros and cons to the concept of net-zero and the practical ways it's being applied to our lives, economies, and politics. But, most importantly of all, we want Canadian youth and communities to understand this nuance so that they know which values to ground themselves in when they pursue their own climate action and pathways to net-zero.

Achieving Net-Zero

We believe the path to achieving Net-Zero should be:



FAIR

The current state of our environment has repercussions for everyone, but climate change has and will more severely impact youth and marginalized communities. It is important to recognize this inequity, and ensure that we are pursuing solutions that **restore a healthy planet for everyone**, not just those that can afford to buy their own access to safety, clean air, clean water, and food. It is essential that we include and amplify marginalized voices in our solutions-building processes to ensure that they are solutions that work for and protect everyone.

To mobilize FAIR pathways, we specifically offer Funding for Net-Zero to student-led projects, ensuring that youth perspectives and solutions are given the support and resources needed to thrive. Additionally, we prioritize our funding for youth-led projects in rural, remote, and/or Indigenous communities across Canada.



ACCOUNTABLE

We know that the concept of “net-zero” is being greenwashed. We know that some net-zero commitments often are making false, empty, or misleading promises. But, we also know that a lot of

amazing and impactful emissions reducing initiatives have been fostered and brought to life in the name of net-zero too. We need to advocate for more transparency and accountability across all net-zero initiatives. We demand that **net-zero commitments and pledges are backed with scientific facts and metrics to demonstrate real emissions reductions**. Additionally, it’s important that communities have the critical thinking skills to assess “net-zero solutions” and whether or not they actually address the root causes of emissions instead of perpetuating the same problems that got us into this climate crisis.

To mobilize ACCOUNTABLE pathways, we require all Funding for Net-Zero applicants to clearly state the metrics they will use to evaluate the impact of their projects. We work with grantees to track progress on these metrics to keep them aligned with their emissions reduction goals. Additionally, we offer comprehensive resources in Curriculum for Net-Zero designed to spark critical thinking and opportunities to explore the most practical and impactful approaches to achieve net-zero.



COLLABORATIVE

The key to building solutions that work, and work for everyone, is collaboration and partnerships. Achieving net-zero is a challenge that calls for adapting our environments, energy systems, buildings, financial, and community practices. It is impossible to be an expert in all of these things, so **it is absolutely necessary to connect and find partners to strengthen efforts and more efficiently navigate the challenges and mistakes that are bound to happen along the way.** It is important to remember that we don't have to always reinvent the wheel when it comes to climate action. We can share information with one another about how a certain solution worked or didn't work to make our collective progress towards net-zero significantly more effective.

To mobilize COLLABORATIVE pathways, we curate the Solutions for Net-Zero library where we publish the stories of youth-led net-zero projects. By capturing and sharing the project stories we're able to provide inspiration, ideas, and lessons learned for other communities who might be exploring where and how to start on net-zero initiatives in their own schools. We also support each grantee by researching and connecting with partners in their communities that might be able to support their work.



Research That Fuelled Our Work

When we began to develop N:OW for Net-Zero, a lot of the decisions we made about how to approach this work were fuelled by recent studies that were conducted on Canadian climate education and literacy by [Dr. Ellen Field](#) of Lakehead University, and [Learning for a Sustainable Future \(LSF\)](#) in addition to the [Opportunity Report](#) that was published from FES' first ever program, the 3% Project.

- [Canada, Climate Change and Education: Opportunities for Public and Formal Education](#)
- [Opportunity Report from 3% Project](#)

Key Takeaways

Some of the key takeaways from these reports that we wanted to mobilize on were:



Canadians and educators agree that more should be done to educate young people about climate, and that all teachers should be teaching about climate change.



Teachers are stretched incredibly thin on time and resources: they need support in climate education in the form of classroom resources and up-to-date information



Canadian teachers and students are looking for more opportunities to learn and act on climate change.



When given the opportunity, mentorship, and resources, students are very effective at implementing high impact climate action projects in school communities.



There is a need for relevant climate education resources in Canadian classrooms



The How

Our Approaches and Takeaways



Our Approaches and Takeaways

Mapping the Sector Research Before You Replicate

Many impactful nonprofits and organizations have been working for years to bring environmental education into Canadian classrooms. When we began building out N:OW for Net-Zero, it was important to us that we tried to connect with these organizations to ask them about their work and to ensure that we wouldn't be duplicating efforts. In the spirit of collaboration, we wanted to see if there was potential for our

program and resources to support their stakeholders and their initiatives. In the beginning we made a concerted effort to research existing stakeholders and programs in the environmental education sector and connect with these peer organizations to see who was doing what, what gaps we saw, and what gaps our peers saw. Through this process we discovered three key things:

1

There weren't a lot of grants or opportunities for educators or students to receive mid-sized funding for projects. The majority of the grants available to them for school-based projects were around \$500-\$5000.

2

There were many climate and environment "lesson plans" and classroom resources, but not very many specifically on net-zero solutions, or emissions reduction solutions (like the [Project Drawdown solutions](#))

3

There was a lot of work being done to support the professional development of educators, and to build capacity for them to be able to teach climate and environment.

This initial round of research and consultations taught us that we should deprioritize our initial idea of developing programming, resources and training for educators. Instead, we aimed to focus our efforts on supporting as many grant projects as possible, and amplifying their stories.

Lesson Plans A Resource is Only Helpful if It's Actually Used

We made 82 lesson plans that are curriculum linked, built off of the [Project Drawdown solutions](#).

What Worked

- **Curriculum-Linked:** We knew for a lesson plan resource to be helpful to teachers it needed to be curriculum-linked so we covered all provincial and territorial curriculums except for Quebec. We wanted the lesson plans to be interdisciplinary, solutions forward, hopeful, and action focused.
- **By Teachers for Teachers:** Our lesson plans are made by teachers for teachers. We paid 20 Canadian teachers to build out the lesson plans in addition to the 3 teacher candidate staff we had working for us that first summer.
- **Getting into Classrooms:** We knew a resource was only useful if it actually made it into the classroom. We made all the resources FREE to access and we invested in a marketing strategy to ensure that teachers actually knew about our library of lesson plans. Through paid social media ads and marketing campaigns we were able to achieve 680 downloads of the lesson plans in this first year.

Lessons Learned

Although [research](#) shows that teachers feel under-resourced when it comes to climate education. We found:

- **Climate education resources exist, but educators do not know where to find them.** We discovered numerous climate lesson plans and educational resources online for educators. Some Canadian environmental education organizations are effectively adapting these resources for Canadian curriculums and providing them to teachers. However, many of these resources are under-utilized or overlooked.
- **Resources need to be shared more widely to increase access and usage.** If many resources exist but teachers feel there aren't enough, a different gap must be addressed. This gap leads to duplicated efforts in resource development.

Following these consultation-informed insights, adding more resources to the already saturated ecosystem might not be the most impactful way for us to address teachers' concerns.

Moving Forward

The team decided N:OW for Net-Zero should focus on connecting with school communities through our grants program. We aim to support educators by recommending existing resources from peer organizations, ensuring climate education materials effectively reach classrooms.



82

total **lesson plans** developed



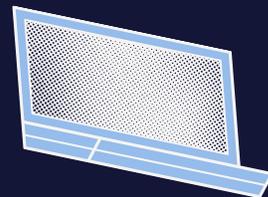
12

provincial and territorial **grade 7-12** curriculums were linked to



16

different academic **subjects and courses** were developed



680

lesson plan **downloads** so far

Outreach Strategies



It's not enough to open a fund. As the funder and therefore stewards of power, it's our responsibility to ensure that all communities are aware of the opportunity.

We put a lot of effort into outreach in this first year of the program. We researched key stakeholder networks from across the country, connecting with them via email, phone calls, and social media to spread awareness about the program launch and what we were offering. The key stakeholder networks we researched and reached out to were:

- School boards
- Provincial and subject specific Teacher Associations
- Peer environmental education organizations and nonprofits
- MPs and MLAs
- University and College Department of Education administration offices
- Indigenous youth and climate councils
- Indigenous community centers/offices
- Public and Private High school principals and secretaries across the country

We believe that if we want to support rural, remote, and Indigenous projects it is our responsibility to research and build relationships with these communities to make sure they are even aware we exist. We did not want our funding announcement to only get circulated amongst those already engaged with and plugged into the environmental education space. Thus, we cast a very wide net for our outreach strategies. When we realized not as many indigenous groups were applying for funding, we had to do very strategic research and outreach to find communities that might be interested in our funding support.



20,000+

emails were sent out to these networks to spread awareness about the program, on top of multiple social media campaigns and one-on-one consultation calls.

Lessons Learned

- **Information spreads fast through the environmental education grapevine.** Peers in the sector are extremely helpful when it comes to amplifying news within their own networks so it's always valuable to take the time to invest in those relationships.
- **Building trust and connections in priority areas requires a lot more strategic research and care,** so it's important to account for this in time management of programming.

Moving Forward

Moving forward we hope to cast an even deeper outreach net to really build connections with unique stakeholders in the communities we'd like to prioritize.

Application Support



We want every applicant to feel prioritized, supported, and know that the process puts them first.

It is a privilege to have funding to give. We honour and respect that educators, students, and community members are the ones actually taking action at the grassroots level, and we deeply appreciate their work. We try our very best to ensure that our application and evaluation infrastructure places applicants at the centre as experts in their communities and as people who are often taking on these projects on top of their regular commitments.

A Simple Application

We tried to build the most simple and accessible application possible that would still give us the information we needed to evaluate applicants in a fair and informed way.

As grant applicants ourselves, we know how frustrating grant-writing is when there's a thoughtless amount of unnecessary questions. In our application we provided 2 templates for applicants to fill out; a Project Proposal Template and a Budget Template.

Coaching Calls

We do not want a closed-door relationship with applicants. We understand that it takes a lot of work to apply for a grant, and we believe it is extremely special to have people engaged enough in climate action to want to apply. We need to respect and protect that engagement. We also want our application to be as accessible as possible. This is why we offered coaching calls, where applicants or prospective applicants could book a call with us to talk out their project ideas and ask questions about how best to fill in the application form.

We gave advice and direction on how they can tweak their ideas to better align with our funding priorities. We wanted to help every application to be as strong as it could be before going into our evaluation process.

If we had concerns or questions or there was something in an application that was misaligned, we didn't just disqualify them—we reached out to them. We gave them the opportunity to explain in their own words. Often these concerns were just communication issues in their application and when clarified, they were strong project ideas that deserved to be evaluated and scored as their best version.

For the applicants that did not get selected for funding, we gave them the opportunity to connect with us to chat about why they weren't chosen.



Grantee Implementation and Impact Tracking

Flexibility, trust, and story-telling

At FES we practice trust-based philanthropy, which in short means we approach relationships with our grantee partners from a place of trust and collaboration rather than compliance and control. We did not want to have an overwhelming amount of requirements, updates, or mandatory deliverables for our grantees.

At the same time, an overall goal for the program was to document and share the project stories, which meant we needed to collect both qualitative and quantitative data about the project implementation. Efficiently being both “hands-off” and “information-gathering” is a balancing act that is a constant work in progress for us and a process that we’re always trying to improve.

We had the following approaches to “supporting and reporting” during the implementation phase:

- **Establishing trust, mutual respect, and partnership parameters: This began as early as the application stage.** We had vetting calls with every potential short-listed applicant group, to actually get to know them and the nuances of their project visions. Once selected as a grantee, we had a 1-on-1 onboarding meetings to establish preferences and expectations for the partnerships.
- **Check-in calls:** We had on average between 1-3 check-in calls with each grantee group throughout the school year. We kept these calls casual, honest, and supportive.
- **Templates for project management and quantitative updates:** Whenever we needed data or updates from our grantees we provided template documents for them to fill out to ensure the tasks were as clear and low-touch as possible.
- **Flexibility and Failing Forward:** We let grantee partners know that we wanted to build this implementation and reporting process with them, and that nothing was set in stone. Flexibility was our most important tool and we tried to make it very clear that their needs were the priority. We actively worked to dismantle traditional “funder/grantee” power dynamics. We wanted grantees to know that we did not view setbacks or mistakes as failure, but as valuable lessons that we really wanted to know and learn from. Establishing this ethos made it easier to have more honest and collaborative check-ins.

- **School visits with videographers:** So much is gained in in-person interactions and the connections we built during our visits to grantee schools were so valuable in terms of trust building, especially with the students. We had a total of 8 visits to grantee schools and on these visits, we brought professional videographers to capture the projects and the implementation stories.
- **Research and Resources:** We offered our support to grantees in hopes of easing some of their implementation work. We offered to do research for them, build any documents, flyers, or resources they needed, and we looked into partnerships that might be beneficial for them to explore.

Lessons Learned

Looking back we wish we had more capacity to provide even more project-specific support and research to each grantee group. This is a priority of ours for the next cycle.

Additionally, we are reflecting on the story-telling process of this program. This past year we really invested time and budget into capturing grantee stories. We do think it's important to highlight hopeful and relatable stories of youth taking local action because we believe this is how projects can make an impact outside of their communities. These stories can act as inspiration and catalysts for peer-to-peer learning.

These stories demystify what climate action can look like in schools, to empower youth and educators to consider replicating these ideas in their own communities. We think all of this is extremely important, but we are very mindful of the costs this information gathering for story-telling took on both us and our grantee partners.

The gathering and sharing of updates and testimonials can be burdensome for grantees, and travelling to build relationships and capture content of each story was expensive and time consuming for our team. Looking forward, our goal is to find ways to streamline this process, exploring unique, low-capacity strategies to maintain relationships and project updates with our grantee partners.





The Impact

Applicants, grantees and impact metrics



The Applicants

In its first year, N:OW for Net-Zero was very much a pilot program that aimed to test many questions we had about climate education and student-led action for emissions reduction.

Naturally, we were not sure how much interest or uptake there would be for this project opportunity. Beyond this, we were curious to see what students and educators would even apply for.

The key questions we had were:

- Where do educators and students' minds go when we say "emissions reduction projects for your school community"?
- What projects can be dreamed of within the range of \$2,500-\$15,000?
- How far can \$15,000 go?

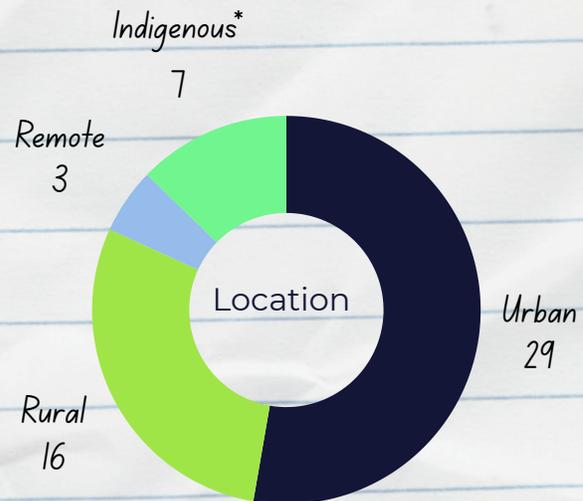
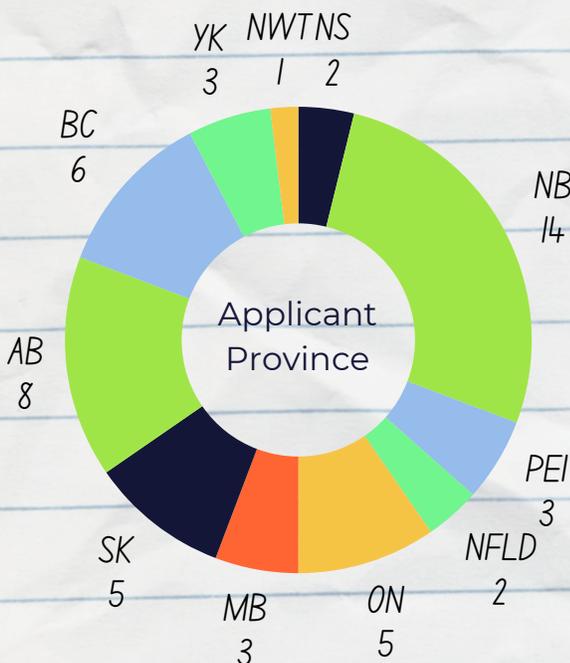
What We Received:

52

APPLICANTS

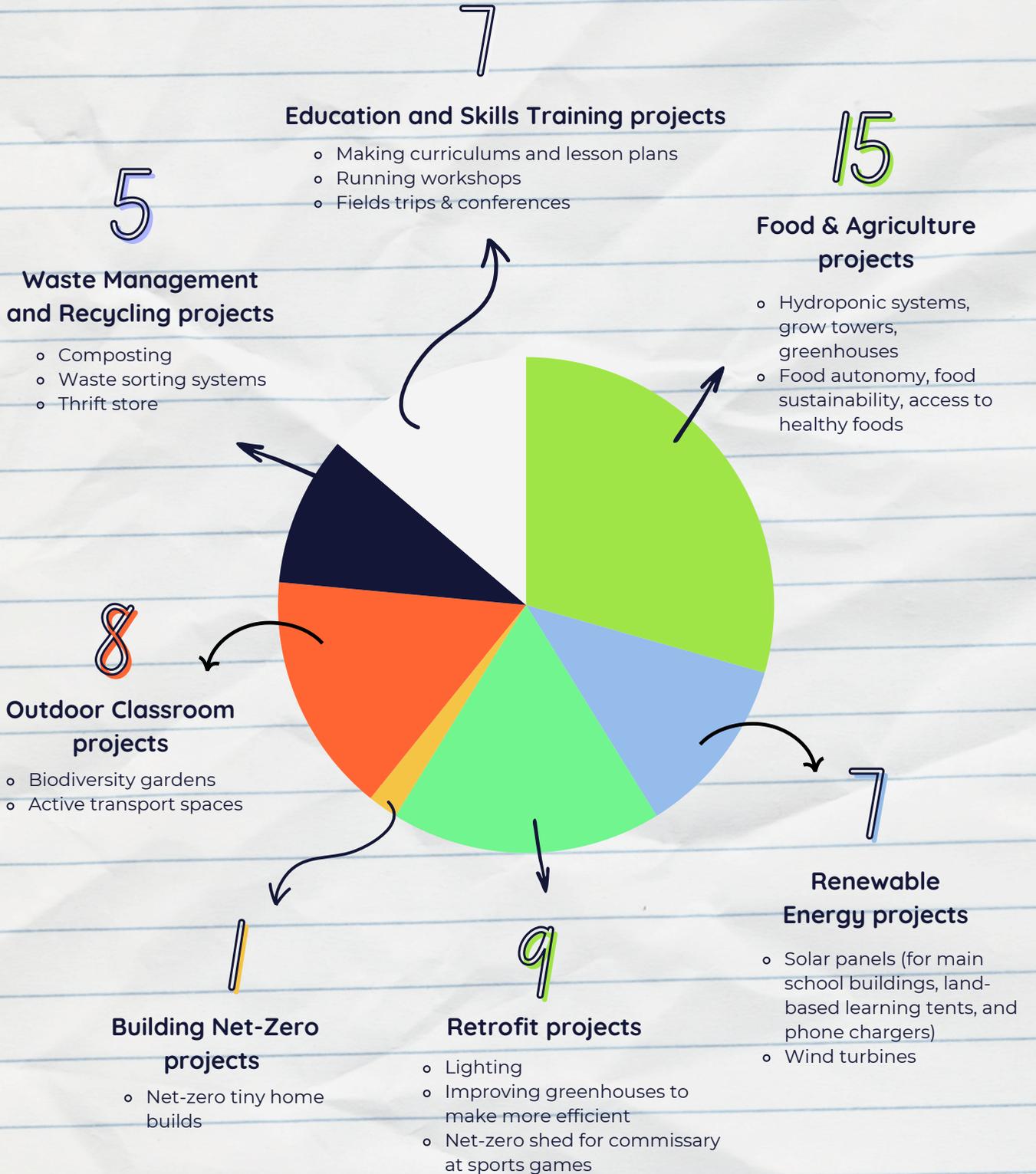
\$606,945

TOTAL DOLLARS REQUESTED



*some Indigenous grantees identified as Indigenous and rural/remote

Project Topics We Saw in the Cycle 1 Pool of Applications



The Applicants

Additional Noteworthy Trends We Saw:

31%

of projects applicants were applying for our grant **to combine with funding** they already received or planned to receive from other organizations.

27%

were projects that would be **one-time initiatives**.

69%

would be building of **some sort of infrastructure** that would need upkeep and maintenance in the future.

What Topic Trends We Did Not See

- Not many applicants had larger climate action plans that their project ideas were a part of. **Only 15% total applicants had mentioned or told us about their project being connected to a larger or more long-term climate action plan for their school.**
- Zero applicants explicitly mentioned having support from or partnership with the facilities management team at their school board.
- There were no project applications for:
 - water saving initiatives
 - planting trees for mini-urban-forests/carbon sinks (only small gardens were applied for)
 - We had a few folks reach out to us before the application due date and ask about planting trees/ mini-urban forests for carbon sinks. During coaching calls we advised them to pivot away from that idea and apply for another project idea. If we hadn't done this coaching we believe we would have had a few applications for tree planting as there was definitely interest.
 - Anything to do with HVAC systems or heating and cooling components of a building (ie. windows)
 - Anything to do with transportation and emissions related to buses and cars taking students to school
 - Renewable wind energy

What This Tells Us:

We received

52

applications totalling a remarkable

\$606, 945

dollars applied for in our inaugural cycle of funding. These numbers clearly showcase an overwhelming amount of interest in climate action projects, and a demand for financial support.

When given the opportunity, many students and educators have strong, ambitious, and downright good ideas for how to tackle emissions reduction in their schools. They have many project ideas and dreams on this topic that are worth

\$15,000

or more.

Initiatives like this are still very much siloed within school communities, in that they are often not a part of any overarching or guiding climate action plan/commitment from the board or administration level. There does not seem to be any maps or long-term plans of action for how individual schools will get to net-zero.



Grantees

In Cycle 1, we were so thrilled to be able to provide funding to 21 grantees across the country! For some grantees, this was their school or community's first big climate project, while for others this was the next step on a longer climate action journey. We see the learning opportunities in both and recognize the importance of that first project inspiring larger climate action.

Our grants were available to any youth under the age of 18 and we had the full range of ages represented in year 1!

We supported projects from grade 1 students helping to plant seeds for their school's greenhouse, to youth in their final year of high school building a tiny house and learning energy efficient carpentry skills to take with them into trades school. While it should not be young people's responsibility to address the climate crisis alone, we believe it's important to support youth in the important actions they are taking so they can envision the better world that is possible.



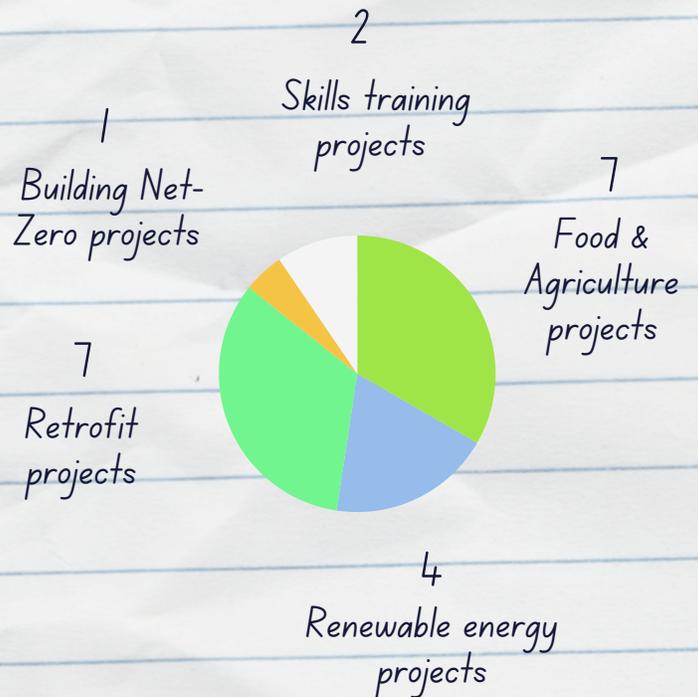
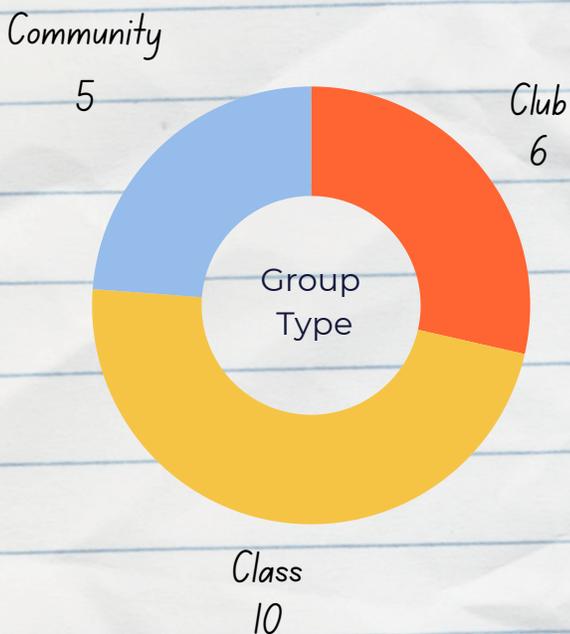
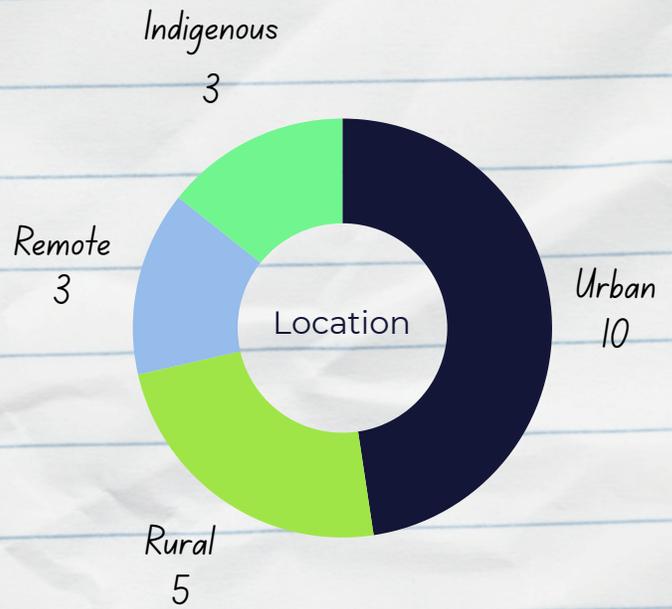
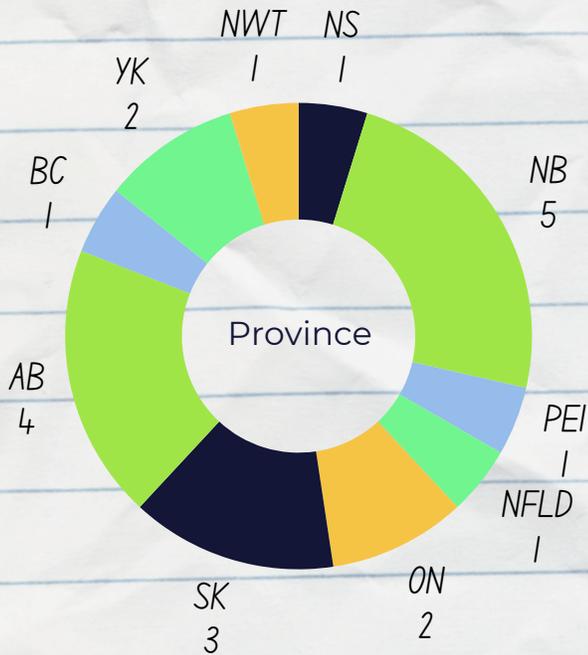
Students from Centre Scolaire Samuel-de-Champlain working on a greenhouse

21

GRANTEES

\$229,400

DOLLARS DISBURSED



Grantee Summaries

In a time when the climate crisis often feels hopeless, we believe it's incredibly important to turn to stories of solutions and hope. These grantees are an amazing example of those solutions in action.

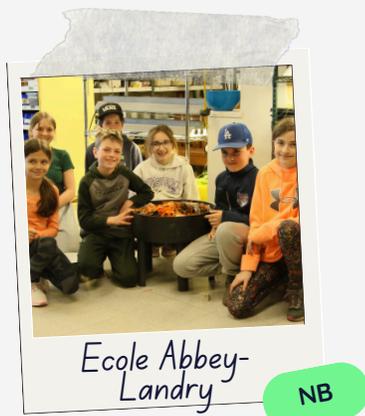
We hope that their fantastic work can inspire their larger communities and show people, businesses, and governments that climate solutions already exist, we just need to be implementing them with the urgency the crisis demands.



Students living in a remote community in Newfoundland worked to address food sustainability in their community through the installation of hydroponics systems.



Grade 6 and 7 students retrofitted the lighting systems in six classrooms and are using it as a pilot project to advocate to their school board for the whole school to be retrofitted.



Grade 1-5 students installed a cold room to store their crops from their greenhouses to improve sustainable access to local food year round.



A group of students used their passion for plants to retrofit their school's old greenhouse and begin growing crops to feed their community.



Students in the climate action club installed solar panels on their school's roof to provide renewable energy and power savings.



Students created a hydroponic growing space in an empty boot room to begin growing food for their school.



Individual Learning Centre

YK

Students built and implemented a hydroponics system to grow crops to support their school community.



New Myrnam School

AB

Students installed solar panels on the roofs of several school buildings to reduce their emissions and increase their energy savings.



NJ Macpherson School

NWT

Grade 5 students installed solar panels to renewably power the lights in their outdoor learning buildings.



Riverview High School

NB

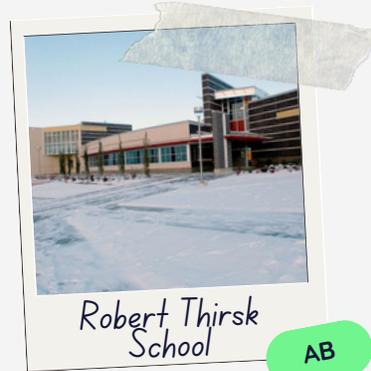
Shop students built an energy efficient and net-zero mini home to be used to address the housing shortage in their community.



Robert Service School

YK

Students learned about net-zero and climate resilient building solutions and how to apply them to projects in their communities.



Robert Thirsk School

AB

Students implemented a rooftop wind and solar array and a weather station system to track their impacts and general local climate trends.



Sussex Middle School

NB

Students in the Earthlings club championed climate action in their community by building a greenhouse to provide food for the breakfast club.



Three Oaks Senior High

YK

Students built and implemented a hydroponics system to grow crops to support their school community.



Truro Middle School

NS

Grade 7 & 8 students addressed food sustainability in their school and community by expanding their aeroponics system.



Two Hills School

AB

Grade 8 students tackled emissions and budget efficiency issues by retrofitting the lighting fixtures of 8 classrooms.

Indigenous Grantees

We also provided funding to several Indigenous community projects that preferred to remain anonymous in this report. We believe that this option for privacy is an important part of building relationships with Indigenous partners and working on truly trust-based granting processes that recognize that communities know what works best for them.

We believe that this is especially important given that our project funding comes from the Canadian federal government, which is a colonial institution with a long history of systemic and ongoing harm and oppression, and whose name some Indigenous projects are not comfortable having associated with their community.

We are sharing short anonymous summaries for these projects in the hopes that other communities can be inspired by these solutions and there can be wider recognition of

the importance of funding climate resiliency and emissions reduction projects in Indigenous communities.

These projects from our Indigenous grantees include:

- Working on increasing energy literacy through an Indigenous lens, while highlighting clean energy solutions being implemented in Indigenous communities;
- Building off-grid renewable energy systems as part of the revitalization of a traditional village site;
- Increasing energy efficiency in community buildings and use of renewable energy; and
- Supporting food sovereignty and sustainability by building a greenhouse and green space.
- Training youth to conduct energy audits for elders' homes and increase energy efficiency through renovations

Lessons Learned From the Grantee Projects

Challenges and Obstacles with Project Timelines:

- When it came to disbursing the funding to each school, the vast majority of our **grantee partners preferred and/or required the payment to be via cheque**. We had to factor in about a week of mailing time for the cheques to even get to our grantees before they could begin their work.
- Almost every grantee project that purchased **equipment faced long waits and delivery time delays** (especially those in northern or rural communities). In some cases there was a 10 week waiting period to receive the equipment needed for students and educators to start on implementation.
- It is **ideal to have project implementation integrated into a designated class/course** as it guarantees time to work on the project. It is more difficult to implement a project as a club or as part of an extracurricular program as there are more barriers to carving out dedicated and routine time to work on it.

- **Canadian winters were a large obstacle** for project timelines as many projects had outdoor components that had to wait to be done during the warmer times of the year.
- Once projects were built and running, extra planning and resources were needed to coordinate the **challenge of summertime maintenance**. In some cases, for the community gardens for example, passionate staff and students often volunteer to go to the school over summer break to keep these maintained.

The Climate Activists Who Didn't Care About Climate

- **Net-Zero is an affordability and careers conversation as much as it is a climate conversation.** Some of the students working on projects weren't even that interested in climate action, but they participated in the project because the life-skills and career training experience were valuable to them. For many of the grantee partner communities, lack of affordable housing, rise in food costs, and expensive energy bills are all very prevalent issues for the students and their families. While working on projects, some students showed impressive dedication to the implementation and expressed excitement about being able to take what they learnt from these projects in class back to their homes to save money for themselves and their families (we heard this from the groups working on growing food with the hydroponics systems as well as the group that was building their own net-zero tiny home).

- **Community work is advocacy work!** In many cases, the grantee students primarily got involved in the projects not because of any interest in climate action, but because it was a social activity where they could hangout with their friends at school. It was only after they joined that they grew a real interest and passion in the projects and broader climate action. It is important to recognize the impacts that group climate action can have on students' abilities to build community and find peers to connect with.



485

total **students & teachers** working directly on project



3,317

students in schools **engaged**



177

teachers in schools **engaged**



680

community members engaged

Climate Literacy Impact

Our program approach operates on the assumption that youth can be best engaged in climate learning when there is a tangible, hands-on component. Too often people are educated on the climate crisis, only to immediately feel hopeless and unable to imagine how they could take action. We believe that while education and discussion is important, eventually we need to move to action. In our approach, it is not literacy OR action, but a hand-in-hand way of empowering youth with knowledge they can do something with.

In order to test this assumption, we provided all of our grantees with a short climate literacy quiz with multiple choice questions about key net-zero concepts.



1,263

students across our grantee communities completed the quiz, providing a very informative snapshot of climate literacy in the areas we were investing in.

Before starting on their projects, the quiz was sent out to students who were working directly on the project and in the larger school community. This helped us get a sense of the climate literacy baseline they were working with.

The quiz acted as a method to track the potential climate literacy increase from doing the project, as well as an evaluation tool to proactively flag concepts teachers might want to focus their education on. For example, one class was very aware of what greenhouse gases were, but they were not sure what activities were producing them and how it was related to their greenhouse project.

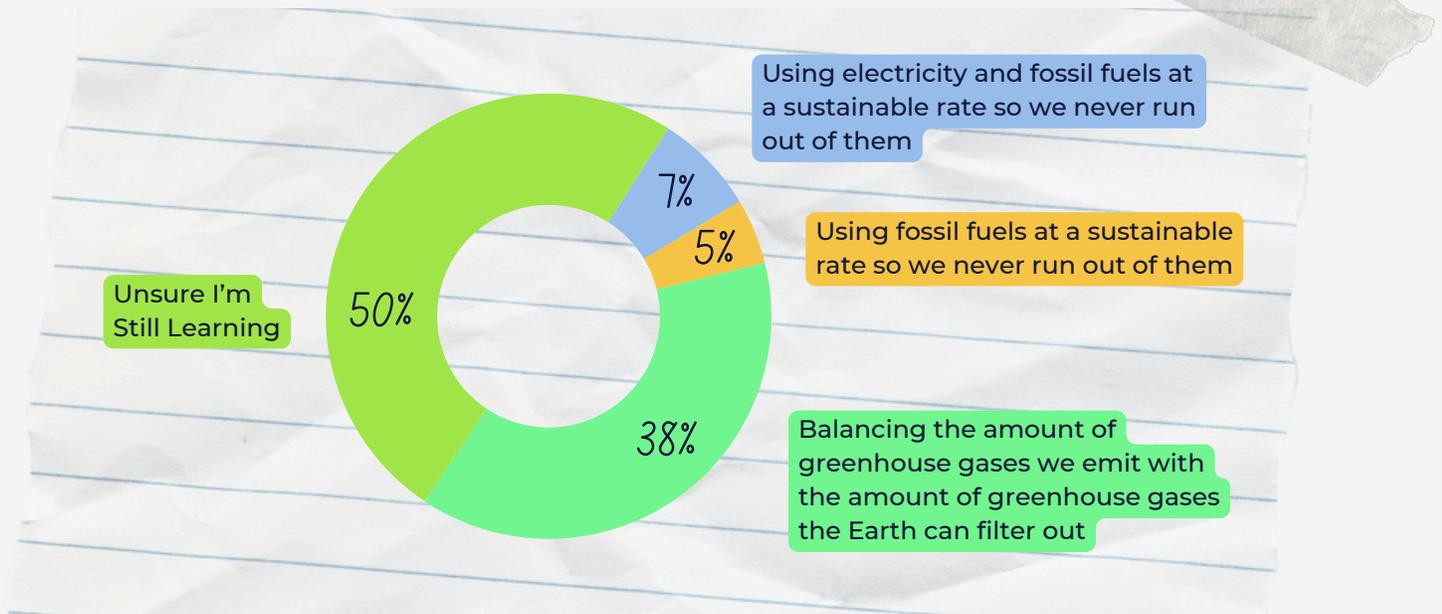
This led the teacher to develop specific lessons on emissions related to food systems, such as the use of chemical fertilizers, shipping impacts, and plant-based diets.

Results of Interest from the Pre-Project Quizzes

“What is the goal of net-zero?”

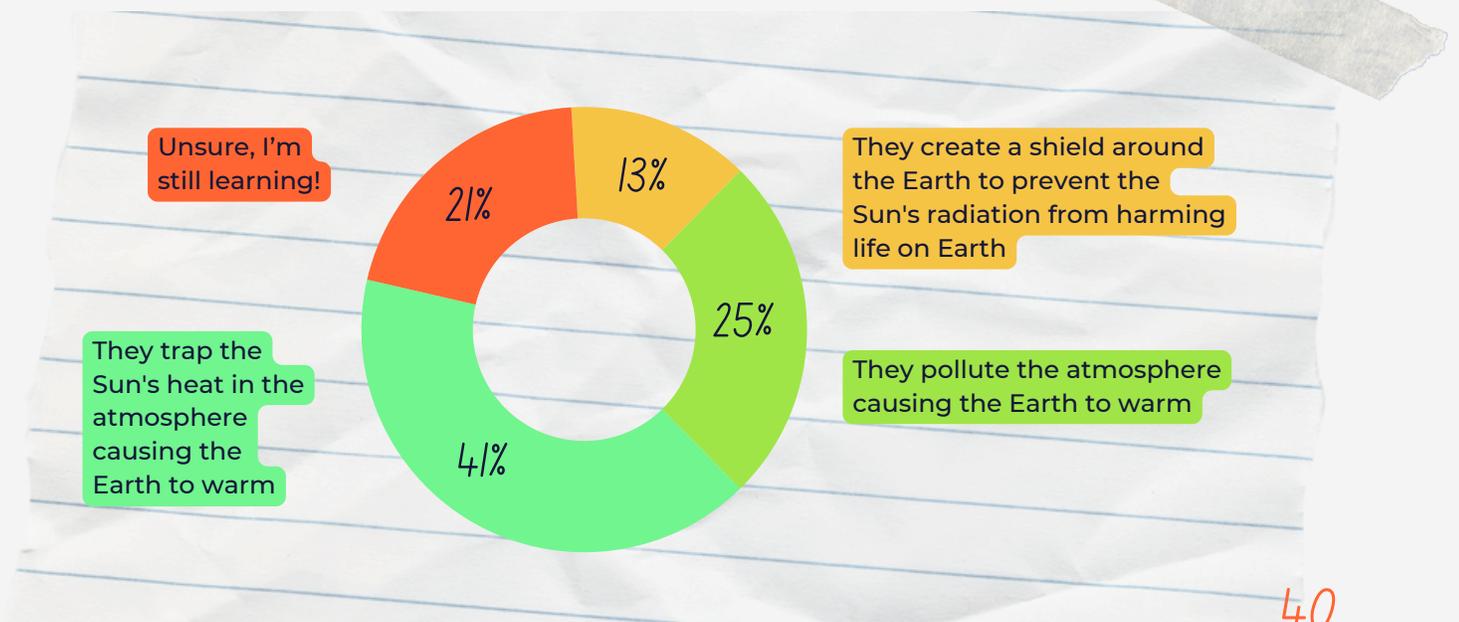
All grantees surveyed

Pre-program 1,263 responses Correct answer



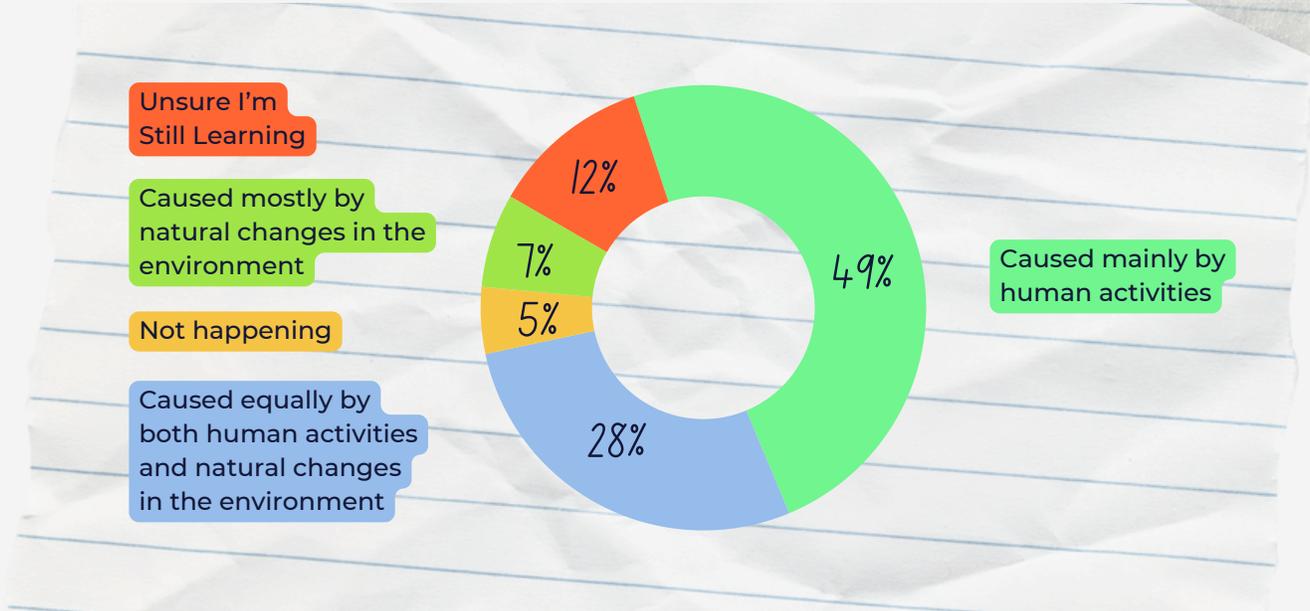
“What do greenhouse gases do?”

Pre-program 1,263 responses Correct answer



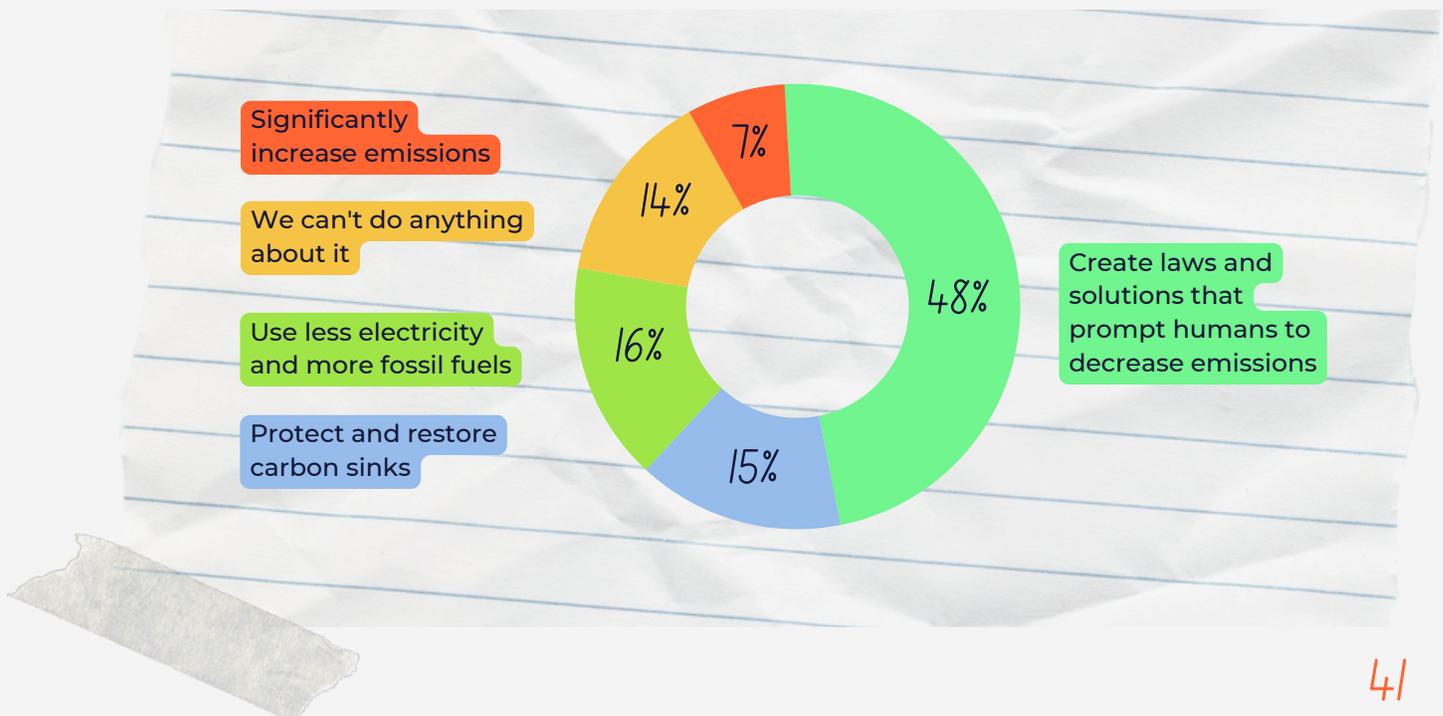
“Do you think climate change is caused mainly by humans or natural impacts.”

Pre-program 1,263 responses Correct answer



“What actions do you think humans can take to prevent further warming?”

Pre-program 1,263 responses Correct answer



As shown in the above graphs, many responding students understood the basic principles of the greenhouse effect and the emissions balancing idea of net-zero. However, we saw that a number of students also had never encountered the term “net-zero” before and struggled to think of solutions. There also were substantial numbers of students who thought climate change was caused equally or entirely by natural effects, rather than human impacts. This underlines the importance of climate education highlighting both the role humans have in causing the crisis and what actions we can take to prevent it.

Because of the constrained timeline we had for year 1’s projects, many of our grantees were just finishing up their projects as the school year came to a close. So only a few were able to track the literacy impacts their project had on the larger student body. We will be following up with a post-project literacy quiz in the fall and look forward to tracking the larger educational impacts of their wonderful projects!

For the few schools that were able to complete the post-survey, we saw some exciting trends, which we can see in the example of Truro Middle School.

For Truro Middle School, climate literacy definitely improved for the students that had directly and indirectly engaged with their aeroponics project. For example:

- For the question “What is the goal of net-zero?” **26% more students answered the question correctly** in the “post-quiz” they took after project implementation.
- For the question “What do greenhouse gases do” there was **a 32% increase in correct answers**.





These increases in correct answers between the pre and post project quizzes demonstrate that project-based learning can be very effective at increasing technical climate science literacy.

What was even more impactful than the increase in correct answers, was the decrease in students that answered “Unsure I’m Still Learning” for the questions. Students in this example of Truro Middle School significantly increased confidence in their answers between the surveys.

Pre-Project Quiz

32%

of participants saying that in a range of 1-10, they felt a 6 or higher in confidence in their responses.

Post-Project Quiz

53%

of participants saying that in a range of 1-10 they felt a 6 or higher in confidence in their responses.



This demonstrates that students at Truro Middle School felt their baseline knowledge had increased over the course of the project. We don't expect everyone to become climate experts by doing one project, but we do hope youth can feel supported in continued learning about environmental issues going forward and even more importantly, feel a sense of agency on the topic.

Lessons Learned about Impact and Climate Literacy

Tracking Actual Emissions Reduction and Energy Savings

Many schools did not have the capacity this year to assess the technical quantitative data about the percentage of reduction in energy consumption and emissions production. Capacity building, partnerships at the board level, and subject matter experts need to be provided for grantee groups to be able to do these kinds of impact metric assessments.

Timeline of Impact

Tracking cultural shifts in broader school knowledge, awareness, and engagement require longer assessment periods than one academic year. The hope is that these grantee projects will create a ripple effect of engagement and increase in climate action within each school community and we intend to check in with grantees over the next couple years to try to track this.

Climate Jargon versus Climate Literacy

Technical literacy about the science of climate and net-zero is important, but equally important is students' confidence in being able to engage in the conversation in the first place. Not everyone needs to know what the Paris Agreement is, but we want every student who works directly on a project to know we're in a climate crisis, to know there are solutions out there, and to feel empowered to engage with these concepts and explore how these concepts relate to their day-to-day lives.



Looking Ahead to 24/25

Key Opportunities For More Impact

Building Capacity for School and School Board Climate Action Plans

Many of our grantee partner projects existed in silos in the sense that they were not connected to any larger, long-term, school or school board Climate Action Plan. Research shows that Canadian school boards have failed to build Climate Action Plans or integrate GHG reduction targets in their strategic plans ([SOURCE](#)). We think that there is an opportunity to create impact here by using the Funding for Net-Zero student-led projects as catalysts for advocacy and momentum to get these plans created. Looking ahead, N:OW for Net-Zero is interested in exploring this via:

- Pairing grantee partners through a “buddy program” for peer-to-peer learning so that schools embarking on projects can better envision larger, long-term applications of their projects.
- Coaching and advocacy support for our grantee partners on how to have conversations with school boards about Climate Action Plans

Mobilizing Metrics: Emissions Reduction and Energy Savings Targets for Schools

Many of the grantee partner projects lacked the access, capacity, subject matter expertise, and/or support from

Board Facilities staff to actually calculate the energy consumption and emissions reduction of their projects. We believe this data can be really empowering and educational for grantees. Looking ahead, N:OW for Net-Zero is interested in exploring this via:

- Pairing energy auditors and green building experts with grantees to provide project recommendations, and energy consumption/emissions reduction data
- Coaching and advocacy to create engagement and capacity at the board level to establish GHG reduction targets for schools
- Coaching and education with grantees about the importance of explicitly connecting projects to measurable climate impacts so they can serve as true climate solutions

Underrated and Overlooked: Tech Classes are Essential to Expanding Climate Education from Theoretical to Practical

When comparing the work of the grantee projects this past year, we’ve noticed that tech, trades, shop, and cooking classes much more often have the capacity to implement robust, ambitious, and impactful climate action projects compared to other academic departments. There is a lot to be gained from investing climate resources, training,

and support into these courses. We believe that they are essential in addressing climate literacy as they are more conducive to practical and hands-on climate education. Project-based learning is foundational to tech curriculums which lends itself well to bridging the gap between climate education and climate action.

Furthermore, linking climate education to topics such as housing, trades, careers, food and energy autonomy creates opportunities for students to engage with the “everyday life-skills” aspects of climate education, which more often attracts a broader spectrum of students. Looking ahead, N:OW for Net-Zero is interested in exploring research, partnerships and resources that increase capacity for climate action in tech courses.



Thank you, we hope this report
inspires you to cultivate a resilient, fair,
and prosperous future.

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