

Map the System Canada

2021 FINALIST SHOWCASE: SYSTEM MAPS

MAP THE SYSTEM 2021

MAP THE SYSTEM

Map the System is an initiative of the **Skoll Centre for Social Entrepreneurship**, based at the Saïd Business School, University of Oxford. Map the System is an opportunity for students and recent graduates to learn more about the issues they care about and present their findings to the world. Tackling global challenges starts with understanding a problem and its wider context rather than jumping straight into a business plan or an idea for a quick fix. Participants are asked to demonstrate a deep understanding of a pressing social or environmental issue by mapping out the landscape of the current solutions and identifying missing opportunities for positive change.

THE CANADIAN EDITION

Map the System Canada provides an opportunity for Canadian students and educators to participate in the renowned Map the System global competition. As part of the global competition, Canadian teams compete in a National Final that brings together emerging systems change leaders who are passionate about social and environmental change.

The Canadian edition of Map the System is organized by the **Institute for Community Prosperity** at Mount Royal University. Map the System was brought to Canada in 2016 with the support of **Re-Code**, an initiative of the **McConnell Foundation**, and the **Trico Charitable Foundation**.

PREFACE

Map the System is a window into what students are interested and passionate about and each year we are moved by the life, knowledge and commitment that students from across Canada put into their projects. At its core, Map the System Canada is an opportunity to catalyze student learnings and support future change leaders across our country.

In 2021, we welcomed 16 Canadian post-secondary institutions into Map the System. The Map the System Canadian Edition is a huge undertaking that cannot be brought to life without a community of leaders and collaborators committed to meaningful changemaker education. We would like to take this opportunity to acknowledge the dedicated systems educators who have supported students each step of the way. Your hard work and dedication has not gone unnoticed and is shaping future systems leaders.

On behalf of our partners and hosts; the Institute for Community Prosperity, the McConnell Foundation, the Trico Charitable Foundation, and the Skoll Centre for Social Entrepreneurship, we would like to congratulate all the 2021 student teams and acknowledge the tenacity it took to complete your MTS project in the middle of a global pandemic.

For all these reasons and more, it is with great excitement and pleasure that we have compiled all the system maps from the 2021 Canadian Finals. This work is an archive and a call to action. It is also a showcase of individual courage. The maps presented here are the results of countless hours of labour, but more than anything else, they are the seeds of a small group of people who are committed to changing the world. Take care and enjoy.

LATASHA CALF ROBE
PROGRAM MANAGER, MAP THE SYSTEM

CONTRIBUTORS

- | | |
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| 08 Concordia University | 24 Simon Fraser University |
| 10 Corpus Christi & St. Mark's College | 26 Trent University |
| 12 École de technologie supérieure | 28 University of Alberta |
| 14 HEC Montréal | 30 University of British Columbia |
| 16 Humber Institute of Technology & Advanced Learning | 32 University of Calgary |
| 18 MacEwan University | 34 Université de Sherbrooke |
| 20 Memorial University of Newfoundland | 36 University of Waterloo |
| 22 Mount Royal University | 38 Wilfrid Laurier University |

PARTICIPATING INSTITUTIONS



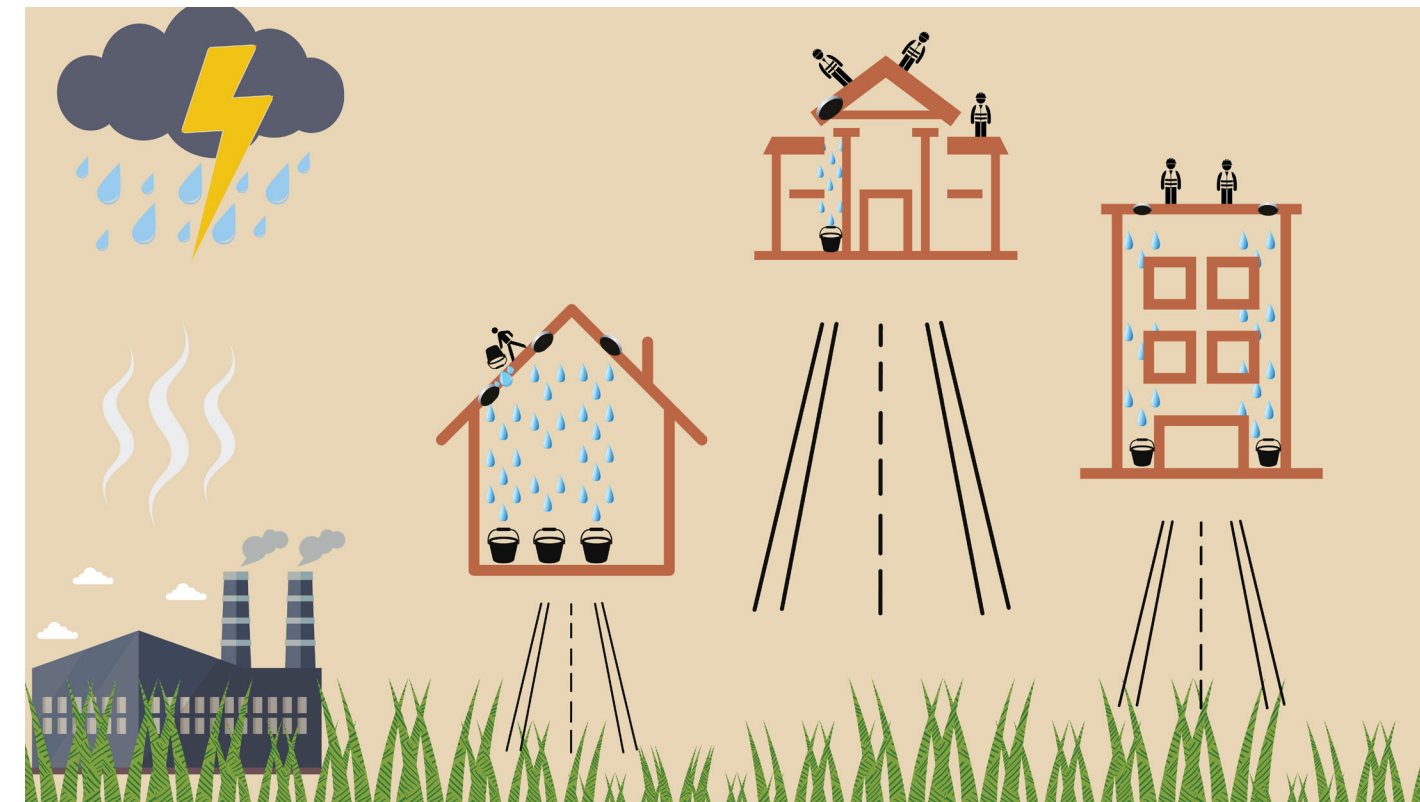
CONCORDIA UNIVERSITY

SHIT STORM

The Concordia University team mapped the waste crisis and three main associated vulnerabilities: plastic waste, landfills and food insecurity. The team used the analogy of a city in a storm to help visualize the system. The main message the map conveys is that no strategic plan can adequately address the waste crisis without addressing the root causes and mental models associated with poor waste management.

Educator: Julie Hamel

Team Members: Alanna Silver, Annie Quadros, Keroles Riad, Michelle Lam, Ribal Abi Raad



LEGEND

-  City = The Society
-  Storm = Waste Crisis
-  Houses = Different Communities
-  Factory = Economic Drivers
-  Emissions = Consumption
-  Affluent Neighbourhoods
-  Under-resourced Neighbourhoods
-  BIPOC and Marginalized Communities, Over-exploited Countries (ex. in Asia and Africa)
-  Hole = Vulnerabilities
-  Bucket = Temporary Solution
-  People = Systemic Environmental Racism
-  Construction Worker = Semi-systemic Solutions

CORPUS CHRISTI & ST. MARK'S COLLEGE

NOT AS IT SEAMS: CHILD LABOUR WITHIN SWEATSHOPS IN BANGLADESH

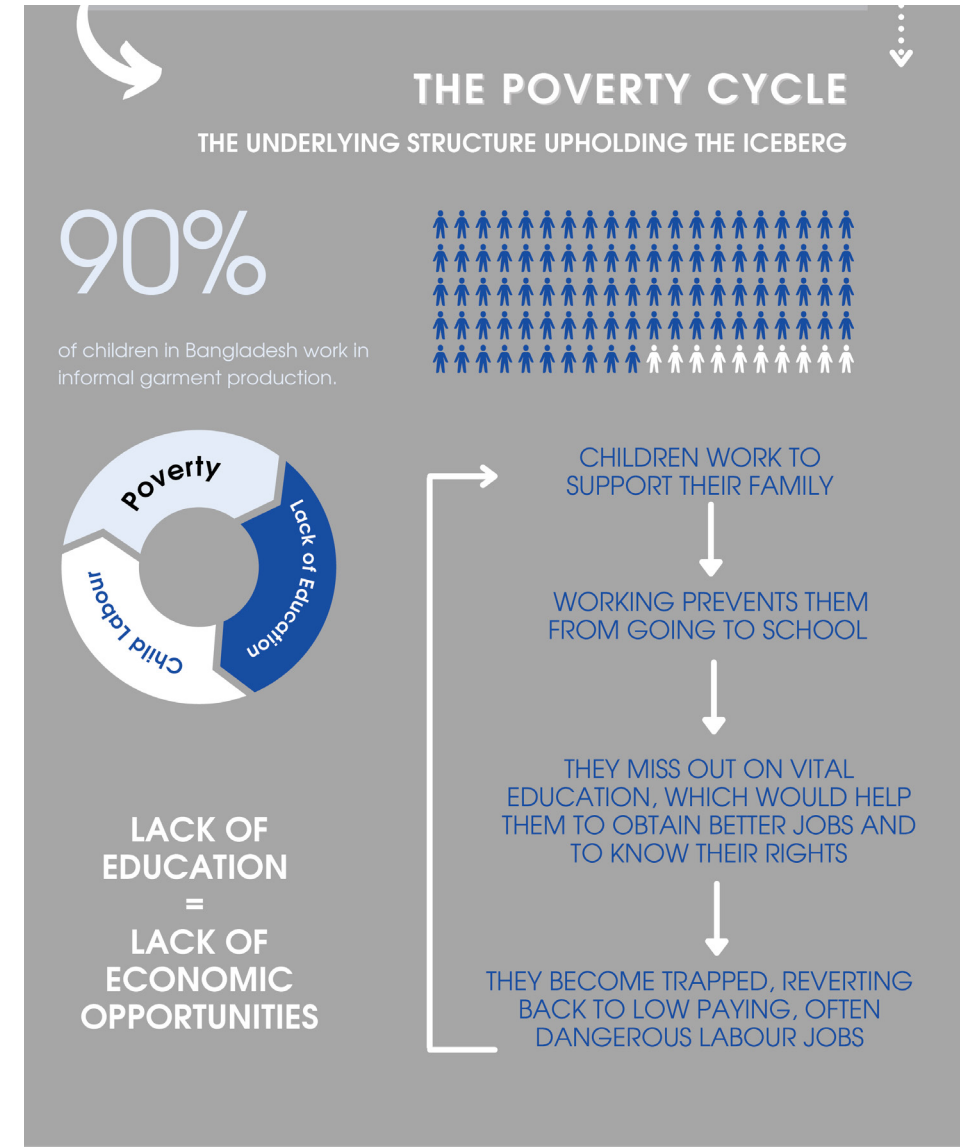
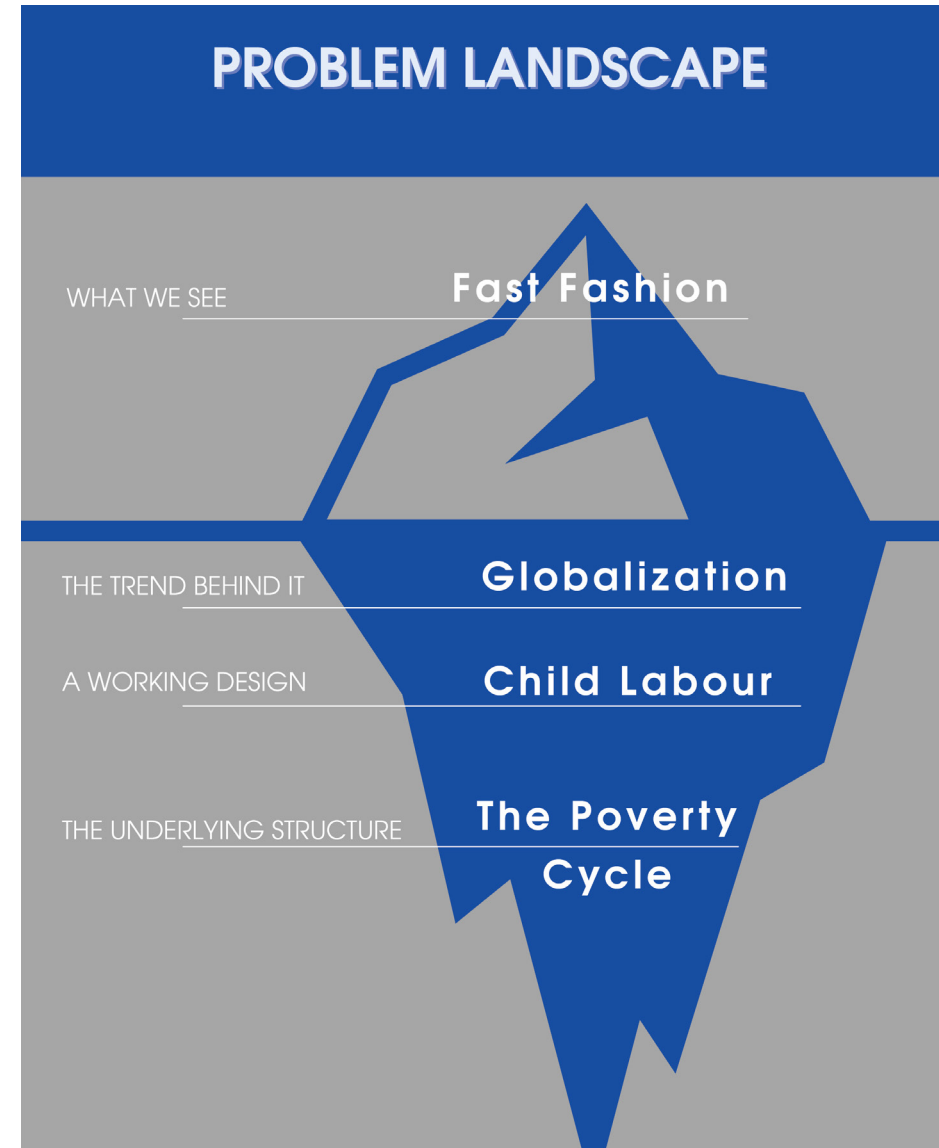
The Corpus Christi team's research centered around two main questions; Why do certain businesses think fast-fashion has a positive impact on workers in Bangladesh? and, What can we do to enhance the ethics surrounding this industry? In order to develop a better understanding of the issue of child labour in Bangladesh, the team used a broad scope of resources, including, stylists, conscious brand shop owners, fashion advocate influencers and social justice and business professors. The team examined Bangladeshi efforts put forward by their government, Canadian efforts, as well as international efforts.

Educator: Antonio Daling

Team Members: Agam Gill, Aubrey Djauhari, Emma Fenty, Maria Dela Rosa, Priya Bagri



ST. MARK'S COLLEGE
CORPUS CHRISTI COLLEGE
Community of St. Marks at the University of British Columbia



ÉCOLE DE TECHNOLOGIE SUPÉRIEURE

ENVIRONMENTAL IMPACTS OF E-COMMERCE IN MONTREAL

The ETS team's research was focused on the undoubted impacts that the growing e-commerce industry is having on the environment. Over-packaging, over-consumption, energy consumption and transportation are significant issues. In the city of Montreal, some of these solutions are already in place or could be implemented in the future such as delivery by bike, smart lockers, green data centers and reusable packaging. In order to properly analyze the problem, the team did several readings, interviews and a survey. Following this, it was concluded that the different levels of government as well as private companies, both carriers and e-merchants should implement concrete measures. Nevertheless, solutions can be put in place to reduce the negative impacts.

Educators: Martin Minville, Annie Levasseur

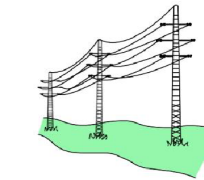
Team Members: Anouk Carrière

Challenge Landscape



Overconsumption

- Social media : influencer marketing, ad, purchases on platform
- E-commerce : 25% to 30% of returns
- Retail commerce : 6% to 10% of returns



Energy Consumption

- 2030 : could consume 10% of the world's electricity production
- 82% of the energy distributed is released as heat
- 40% of the energy associated with the data center is used to cool it



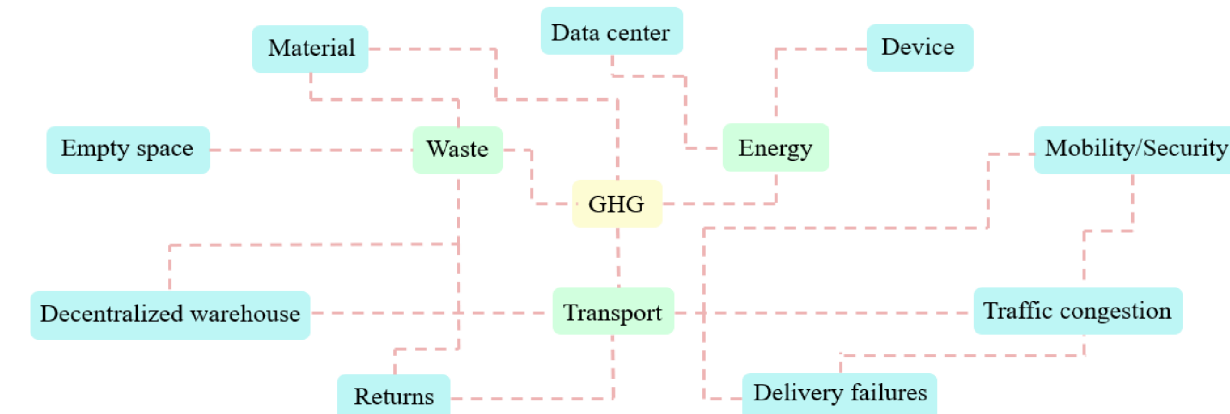
Overpackaging

- Packages contain 43% empty space
- Plastic : poorly recycled and not biodegradable
- Cardboard : recycles more easily, but is more polluting during its production



Transportation

- Last mile
- Deliveries within 24 hours
- High number of returns
- Failure rate of deliveries



HEC MONTRÉAL

HOMELESS IN MY HOMELAND

The HEC Montréal team's research focused on the systemic causes of Indigenous Homelessness. This issue is complex, as Indigenous peoples in Canada have suffered and been marginalized since the arrival of European settlers. Research methods included reading scientific literature, news articles and organizations official reports. Multiple stakeholders were interviewed, such as members of community organizations, members of municipal institutions and university professors. Following research, the team was able to gain an understanding that Indigenous homelessness is a deeply rooted issue that is reinforced by current and historical discriminatory policies and laws. The team learned that very few solutions exist and are often not considerate of the specific needs of Indigenous peoples.

Educator: Mathieu Couture

Team Members: Estelle Santerre, Rebecca Norton, Clara Thorin

Homeless in my Homeland

The overrepresentation of Indigenous peoples experiencing homelessness in Montreal

12%

of Montreal's homeless peoples are Indigenous, while they only represent **0,6%** of the general population.

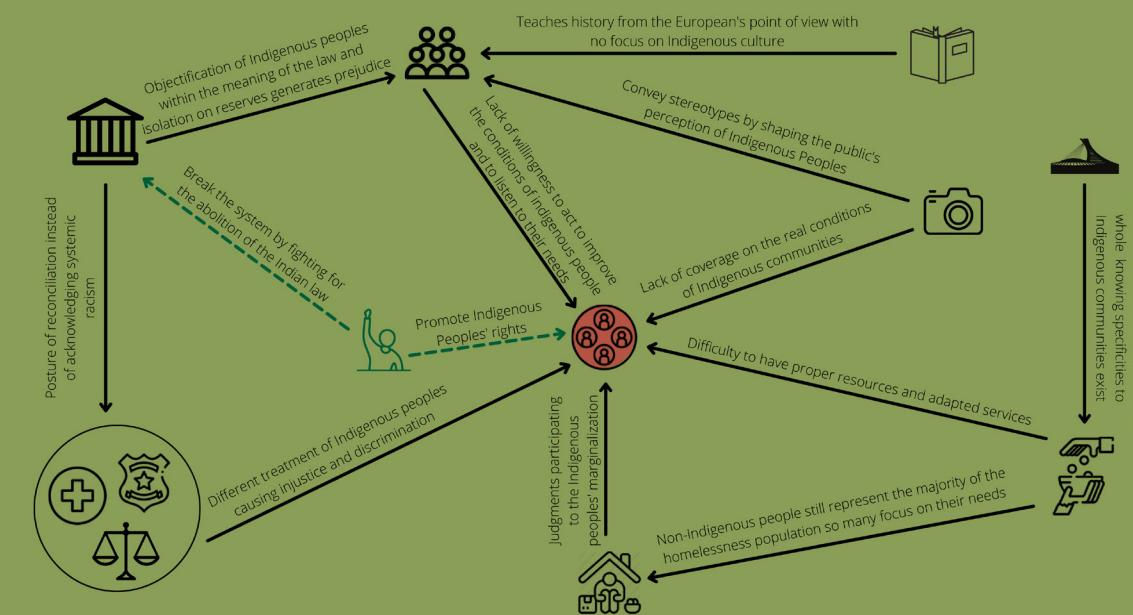


Indigenous peoples are **8 times more likely**

to be homeless than non-Indigenous peoples in Canada's urban centers.



A System That Perpetuates the Issue





AUDIENCE CHOICE WINNER

HUMBER INSTITUTE OF TECHNOLOGY & ADVANCED LEARNING

FOOD INSECURITY IN TORONTO

Food insecurity in Toronto is typically understood as the acute condition of hunger, rather than as a broader and more encompassing condition brought on by chronic poverty and socio-economic exclusion. Using a systems thinking approach, the Humber team examined this socio-economically rooted issue, and its negative impacts on health equity, decision making, the environment and quality of life for low-income populations in Toronto. The team explored the interconnections and gaps in existing solutions and underlying mental models that perpetuate a dysfunctional food system.

Educators: Elinor Bray-Collins, Isabel Sousa

Team Members: Shannon O'Connor, Natsuki Kyokane, Khantulga Zalaa-Uul

Mental Models of Food Insecurity

Government's Mental Model



Food insecurity as an individual issue addressed by food banks' effort

Food Banks' Mental Model



Food insecurity as an income inequality issue required policy reforms

Business' Mental Model



Food insecurity as an individual issue utilized as CSRs

Providing Funds



Donating Food



Advocacy



Gap 2

Perpetuating Neoliberal individualism

Gap 1

Lack of Policy reforms & social assistance

Food Insecure HHs



Gap 3

Only 21% usage of low-income HHs

Lack of finance Stigma around food banks

MACEWAN UNIVERSITY

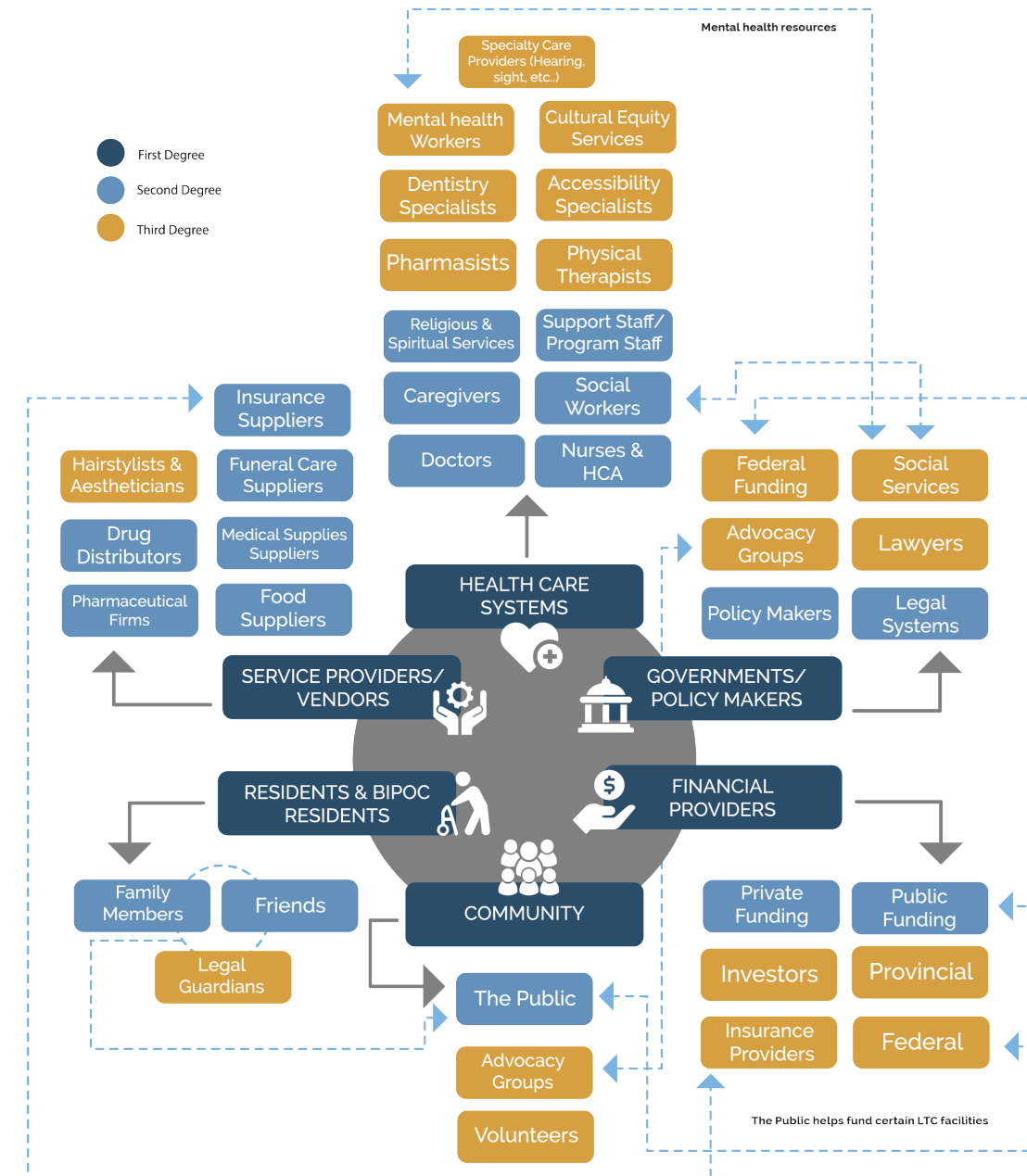
FAILURE OF CANADA'S LONG-TERM CARE SYSTEM

The MacEwan team researched the systemic cracks in Canada's long-term care system that have resulted in an unfortunate reality for Canadians in long-term care facilities. The quality of care and life that residents experience is far below the threshold of Canada's healthcare standard, having profound impacts on medical and social (emotional) well-being. The low standard of care has led to mental health decline, medical health decline, and premature death of residents of these facilities. Canada's senior population is growing, and the current long-term care system cannot deliver quality care that is synonymous with the country's standard of healthcare.

Educator: Heather Braid

Team Members: Lisa Cox, Emma Wine, and Emma Skogstad

LTC Stakeholder System Map



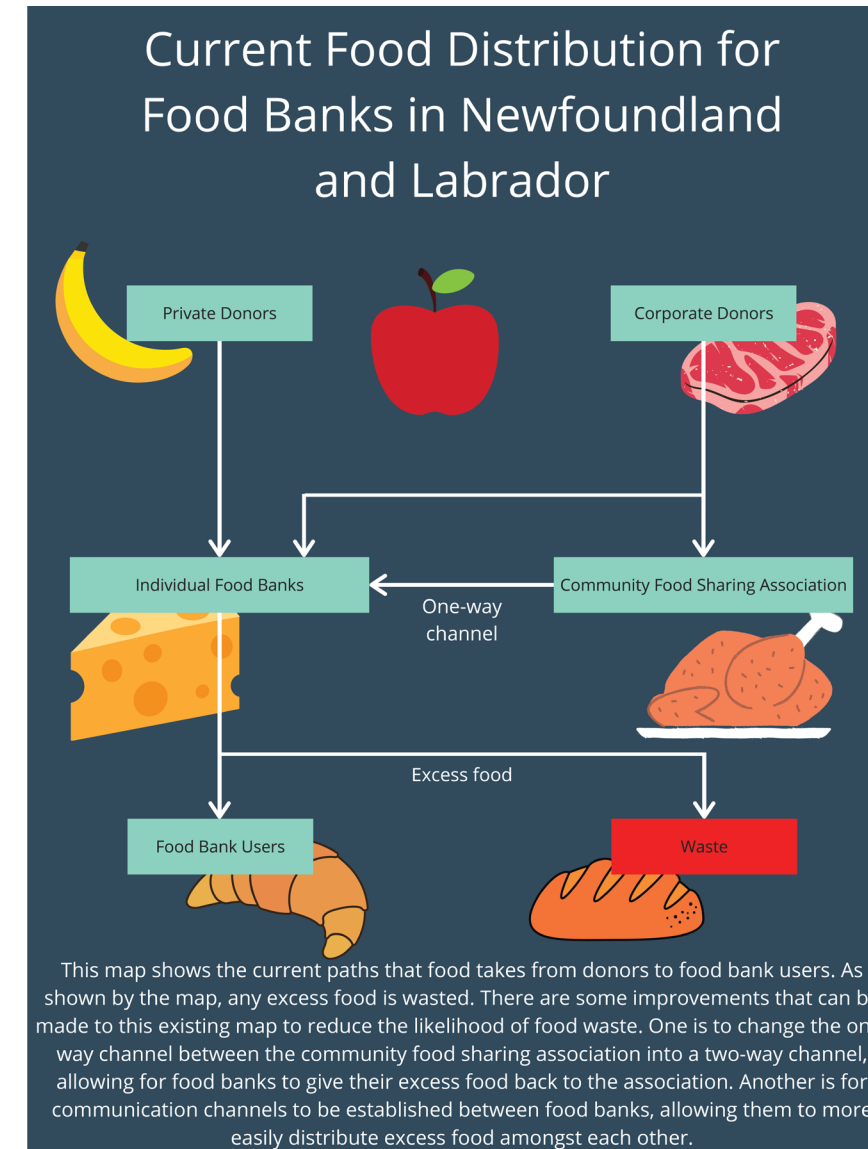
MEMORIAL UNIVERSITY OF NEWFOUNDLAND

PROBLEMS FOOD BANKS FACE IN NEWFOUNDLAND

The Memorial University team examined challenges faced by Food Banks to better understand food insecurity in Canada. Food insecurity is a big problem across Canada, with 4.4 million Canadians struggling to access healthy food. The team engaged with 14 food banks across Newfoundland & Labrador to better understand the issue and found that lack of inventory space and communication systems with stakeholders and urban v.s rural needs were some of the greatest barriers faced by food banks in the province.

Educators: Sarah Croft, Nicole Helwig

Team Members: Daniel Guaman, Saif Ahmed, Sazied Hassan, Sean Christian Drover, Stefan Boon-Petersen



MOUNT ROYAL UNIVERSITY

AN ANALYSIS OF THE OVERREPRESENTATION OF INDIGENOUS PEOPLES IN CANADA'S CHILD WELFARE SYSTEM

The Mount Royal University team explored the treatment of Indigenous Peoples in the child welfare system in Canada. The team used a variety of written sources and conducted interviews to best understand the issue. They found that the child welfare system is essentially a repeated experience of residential schools, as families are still being torn apart. Colonialism and discrimination are key reasons why Indigenous peoples are overrepresented in the system. Most of the problems appear to be caused by the Canadian government's lack of poor collaboration with Indigenous Peoples, in history and today. Currently, the government is failing to take both long-term sustainable action and actions recommended by Indigenous Peoples.

Educators: Ashleigh Metcs, Katharine McGowan

Team Members: Eloisa Gillham, Emma Berger, Mizuki Oshita, Vanessa Sandoval



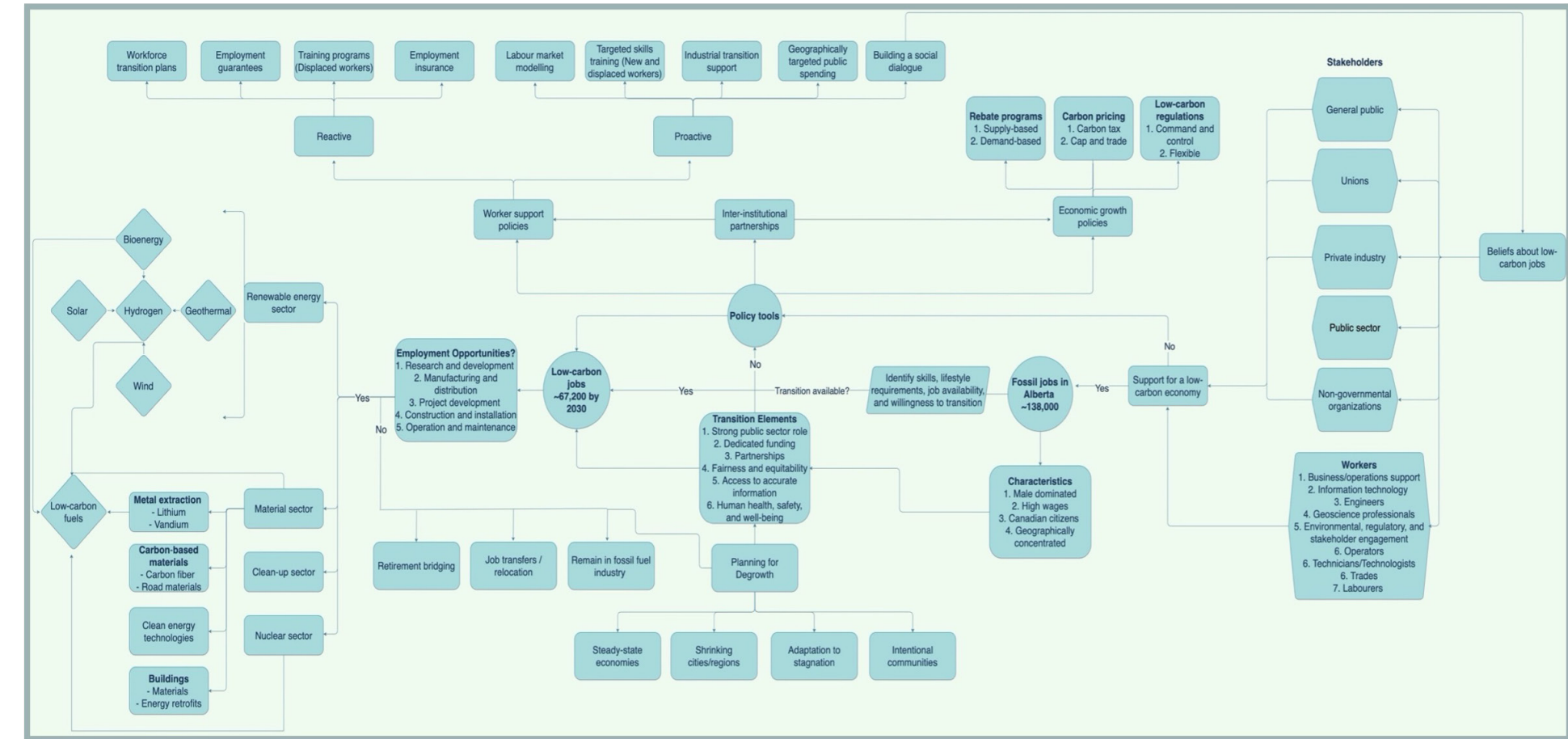
TRENT UNIVERSITY

FOSSIL FUEL WORKERS FACING A LOW-CARBON FUTURE IN ALBERTA, CANADA: MAPPING THE TRANSITION

The Trent University team described the system needed to transition fossil fuel workers to low-carbon jobs in Alberta, Canada. They focused on the opportunities, constraints, and considerations needed for a low-carbon transition in Alberta, and policies that have been applied for existing transitions. This research found that there are many low-carbon job opportunities in Alberta, however, not enough to replace all current jobs in the fossil fuel sector. Their research indicated that an Alberta transition into a low-carbon future will demand a mix of reactive and proactive policies that support workers and communities and stimulate low-carbon job growth.

Educator: Stephen Hill

Team Members: Andrew Clark, Kayla Mackintosh-Anderson, Genna Saunders, Mitchell Horn, Mitchell Taylor





TOP 4 FINALIST



AUDIENCE CHOICE



UNIVERSITY OF ALBERTA

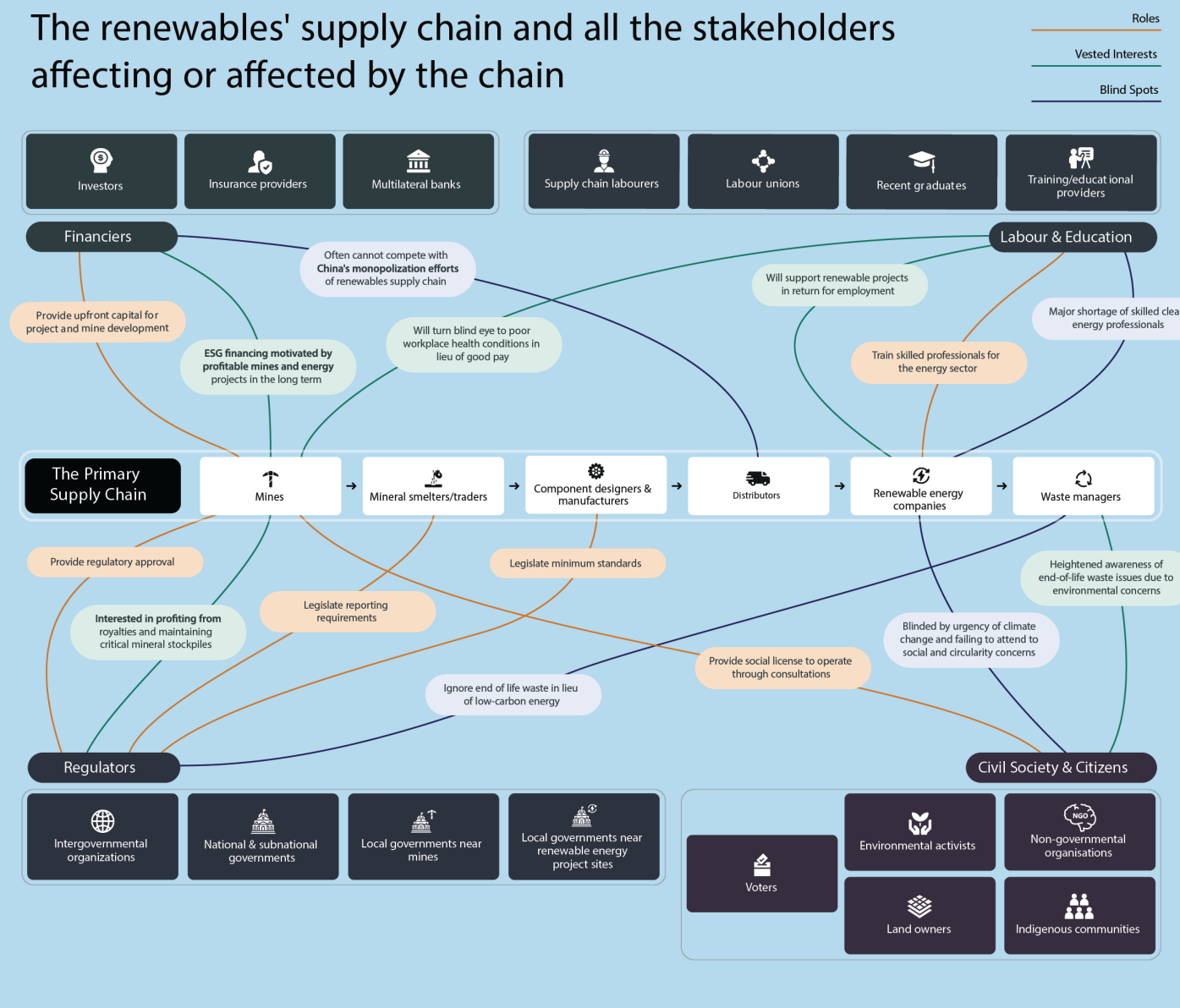
GREEN IS NOT ENOUGH: MAKING RENEWABLE ENERGY REGENERATIVE

The University of Alberta team sought to understand and map the high-risk supply chain implications of building new renewable energy projects. In other words, their report concerns the manufacturing, implementation, and decommissioning of three major renewable energy technologies: wind power, solar power, and electrical storage technologies, such as lithium ion batteries. The report is not focused on the technical implications of integrating renewables into electricity grids as this topic is already well-researched.

Educator: Douglas Leong

Team Members: Christopher Chan, Kabir Nadkarni, Kayvon Miller, Kía Valdez Bettcher

The renewables' supply chain and all the stakeholders affecting or affected by the chain





TOP 4 FINALIST

UNIVERSITY OF BRITISH COLUMBIA

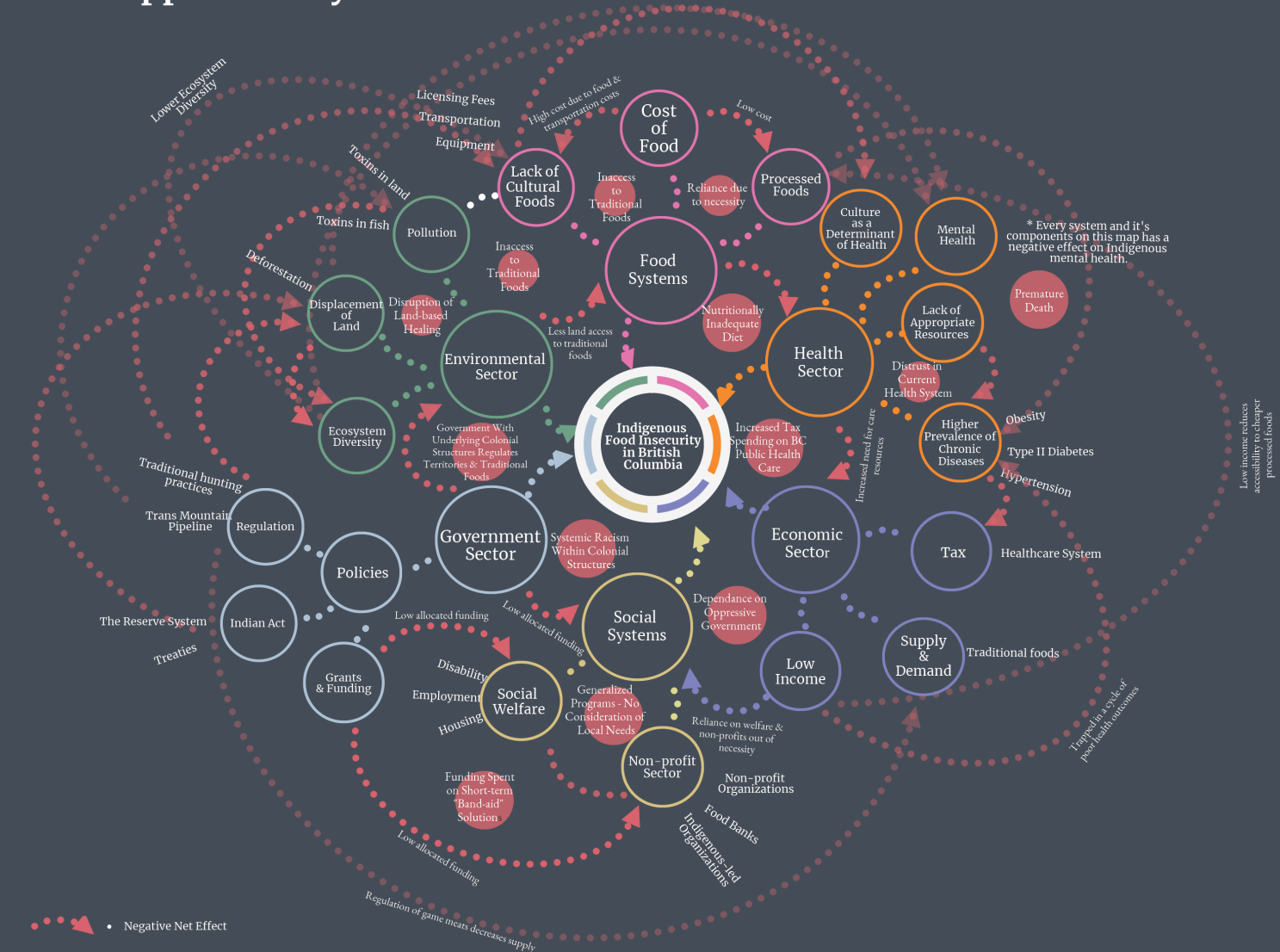
UNIQUE GET TOGETHER SOCIETY (UGTS) AND URBAN INDIGENOUS FOOD INSECURITY IN BRITISH COLUMBIA

The University of British Columbia team investigated the challenge involved in achieving food security in British Columbia for Indigenous Peoples living in urban settings. The team conducted a literature review, interviews with stakeholders and surveyed UGTS' Essential Food Basket program users. The key findings were that urban Indigenous Peoples experience disproportionate rates of food insecurity, and that there are many complex systemic challenges that perpetuate food insecurity in this population.

Educators: Susan Grossman, Natsuki Abe

Team Members: Anika Cheng, Cathy Zhu, Emily Chau

Urban Indigenous food insecurity is firmly held in place by a complex interplay between oppressive systems



Stakeholders are highly interconnected, **government and environmental sectors** play the biggest roles. For true, lasting change, collective action between all stakeholders must be adopted.

UNIVERSITY OF CALGARY

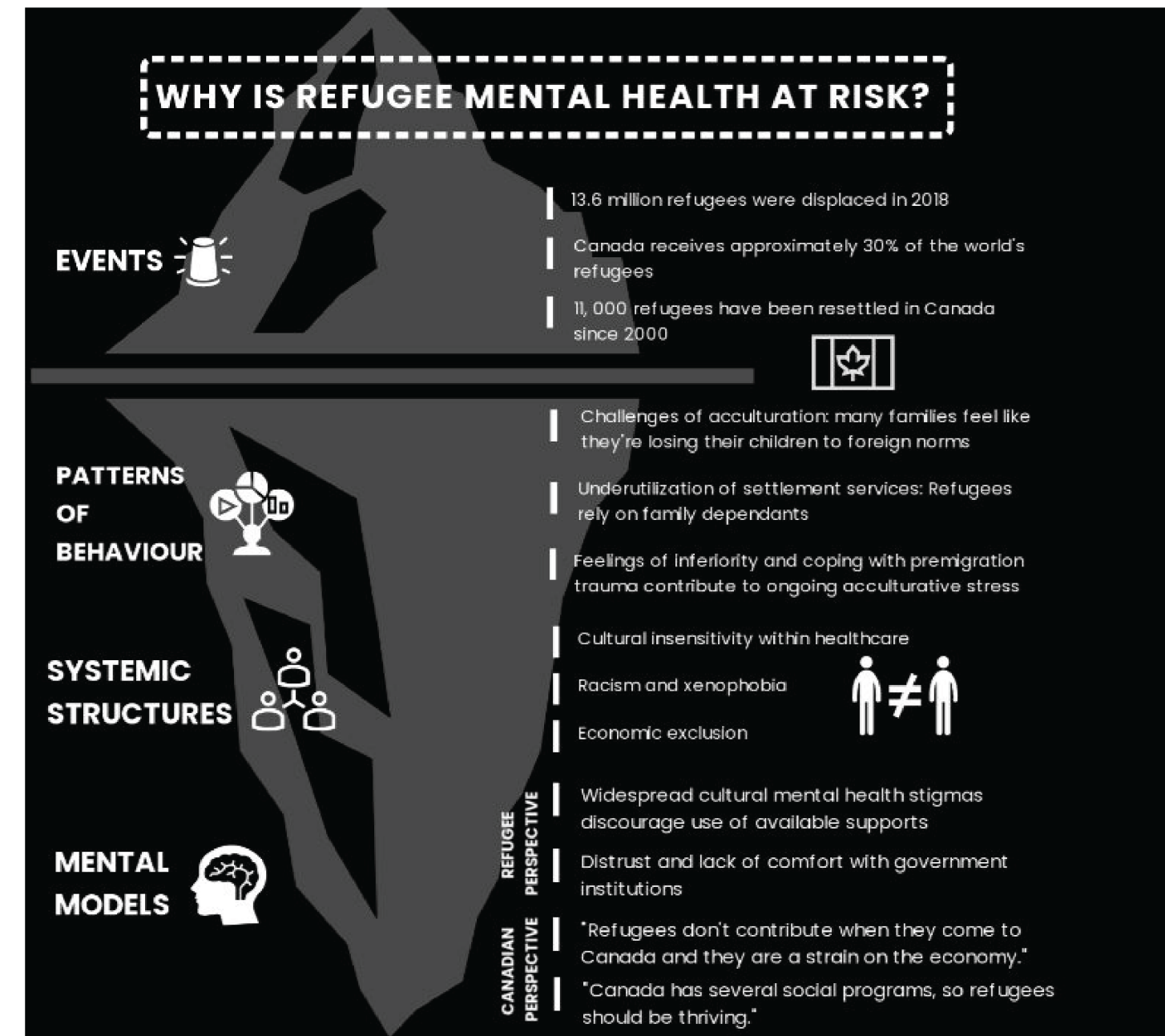
DECONSTRUCTING REINTEGRATION & MENTAL HEALTH OF CANADIAN REFUGEES

A critical analysis of psychosocial determinants and broad health and reintegration systems that affect the mental health outcomes of Canadian refugees. The University of Calgary team's research method largely included secondary research, in addition to insights provided by a primary source via an ethical interview with formulated questions.

Ultimately, the project contributes to the ongoing need for increased research of the refugee experience and can be shared with organizations such as the Multicultural Mental Health Resource Centre, Immigrant Services Calgary, and The Immigrant and Refugee Mental Health Project to contribute towards innovative solutions and interventions.

Educators: Kevan Coyle, Alya Jinah

Team Members: Esther Udeh, Faith Moghaddami



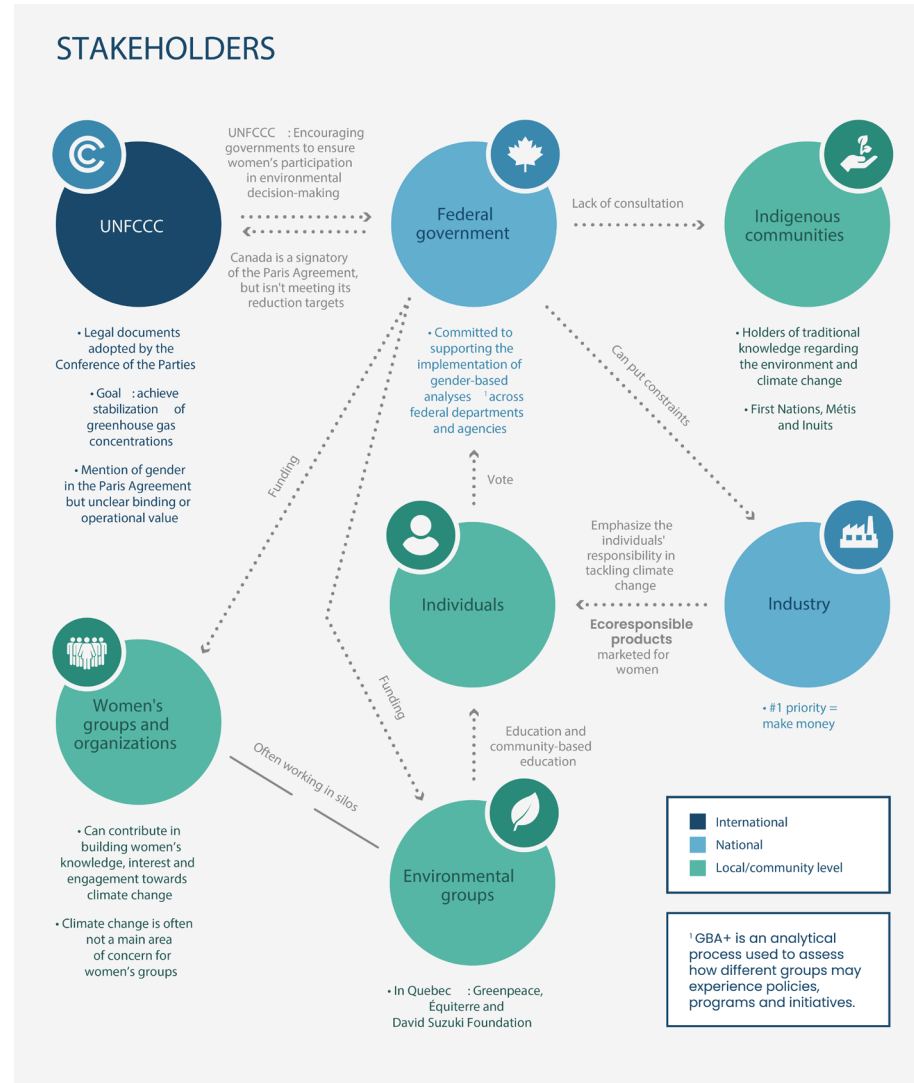
UNIVERSITÉ DE SHERBROOKE

WOMEN AND CLIMATE CHANGE

The impacts of climate change are not gender neutral, and women across the world are disproportionately impacted by climate change. In order to have a better understanding of the impacts of a global issue at a local level, the Université de Sherbrooke team identified stakeholders and existing adaptation strategies in Canada. One of the key findings is that stakeholders often work in an isolated manner, for instance, environmental groups and women's groups are often working in silos. The team found that the integration of a gender perspective in policies is necessary to address the climate crisis.

Educator: Miguel Aubouy

Team Members: Adham Elshaer, Amandine Gournay



WHO SHOULD "SAVE THE PLANET" ?

The risk of overburdening individuals with the duty of "saving the planet".



• Importance of small individual actions, eg. zero waste

• Gendered division of labour in households

• Risk of exacerbating the mental load of women

• Women will carry out their actions in a depoliticized way, in the domestic sphere

• Risk of relieving organizations and corporations (and the government) of their responsibility



Canadian women spent 50% more time doing unpaid work than men in 2015 (Statistics Canada).



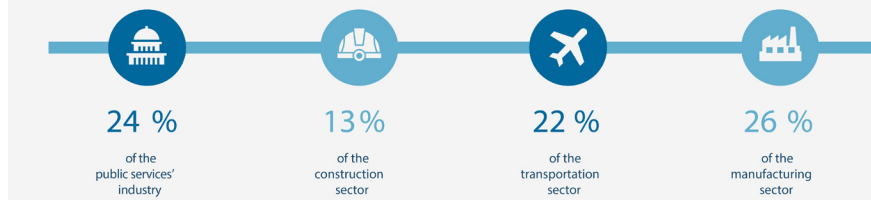
Women are responsible for approximately 70% of household consumption decisions and are still in majority doing the grocery shopping, cooking and domestic chores.

HISTORY OF THE CURRENT PATRIARCHAL SYSTEM

Our contemporary relationship with nature is inherited from the construction of modern science by Descartes and Bacon and the dualism man / nature. **The scientific and industrial revolutions were built on this dualism.** Climate change is the result of colonialism, patriarchy, and neoliberal forms of development (such as environmental exploitation).



The stakeholders with the most power are the federal government and industry, places where women are under-represented. For instance, in Quebec, women represent :





TOP 4 FINALIST



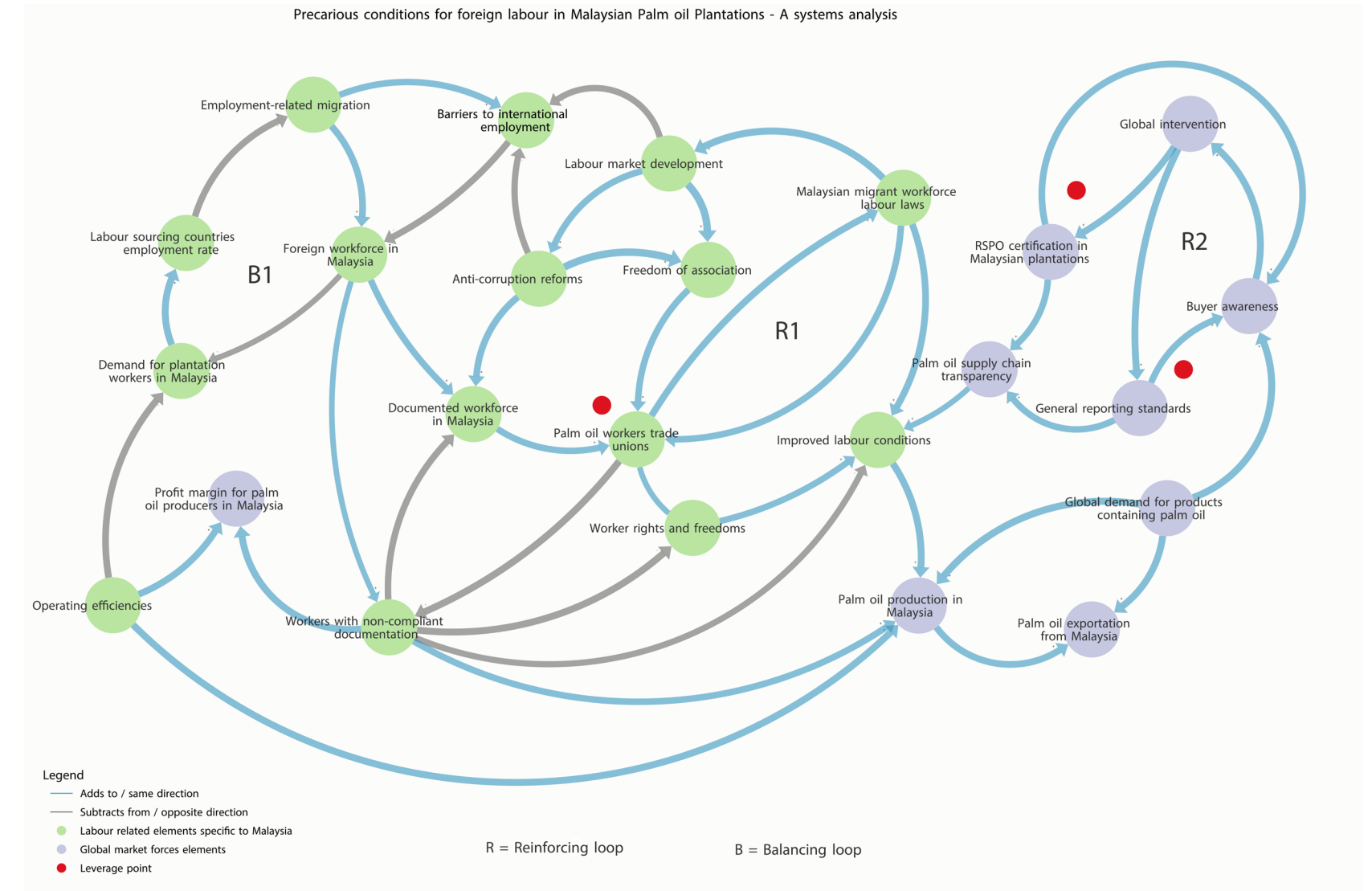
UNIVERSITY OF WATERLOO

PRECARIOUS CONDITIONS FOR FOREIGN LABOUR IN MALAYSIAN PALM OIL PLANTATIONS

The University of Waterloo team examined the role of foreign labour in Malaysian palm oil plantations and oil mills. The research objective of this team was to explore the precarious labour conditions in Malaysia's palm oil plantations to better understand patterns of behaviour and the structure of the system that might be holding patterns in place. It was found that working conditions of foreign labourers is likely to deteriorate without an expansion of key supervisory regulations and labour representation mechanisms. The latter needs to be integrated with a pull strategy from consumers and thus buying corporations focused towards developing better working conditions for the labourers.

Educators: Paul Heidebrecht, Emily Charron

Team Members: Ewomazino Iyanu Oluwa Odhigbo, Leah Feor, Muhammed Ahsanur Rahim





TOP 4 FINALIST

WILFRID LAURIER UNIVERSITY

MODERN DAY SLAVERY: SEX TRAFFICKING IN CANADA

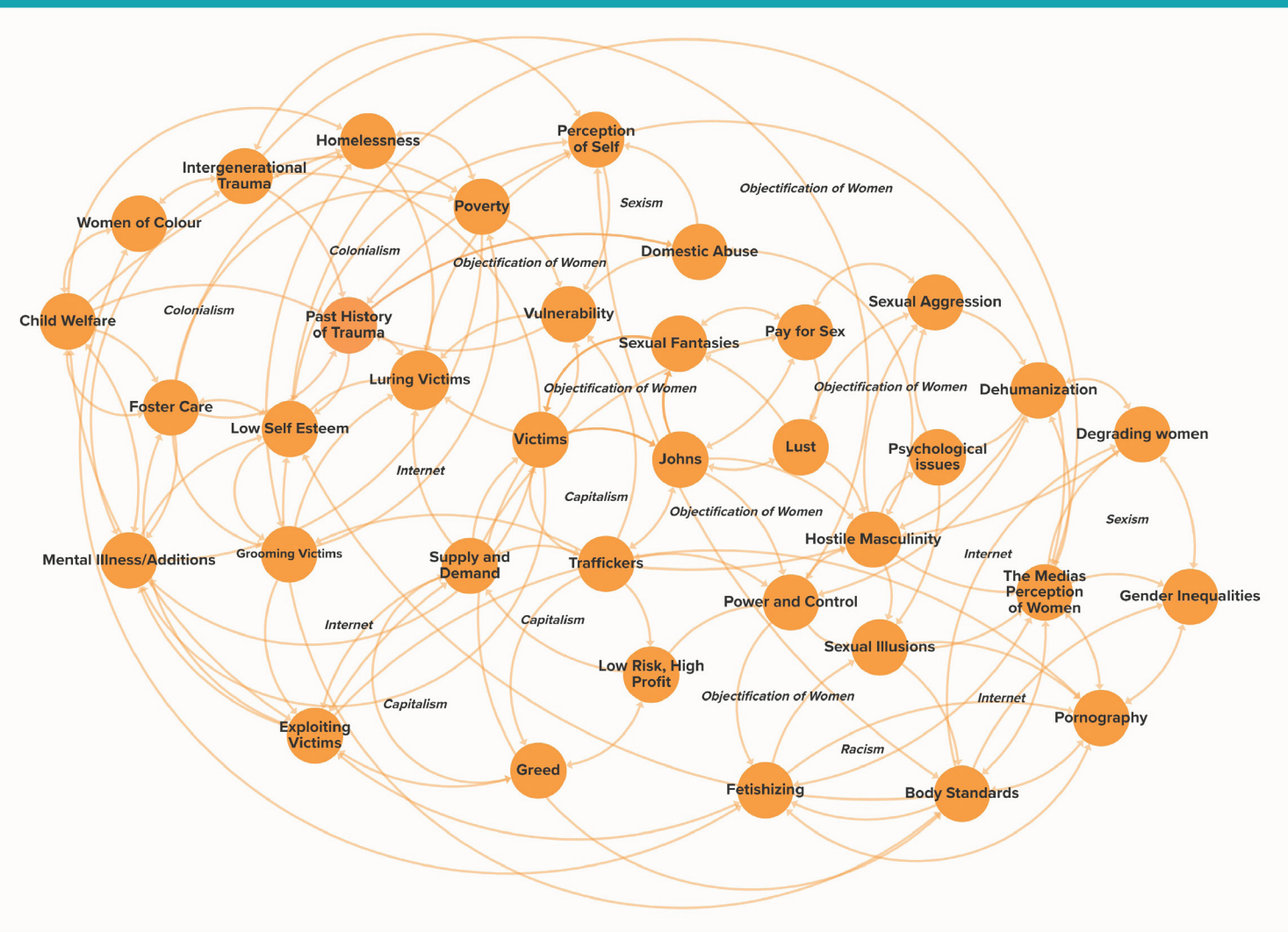
The challenge the Wilfrid Laurier University team examined was sex trafficking in Canada. The information for the report was obtained through a variety of qualitative primary and secondary sources. Primary sources included personal interviews conducted with community organizers and non-profit employees. Secondary sources included journal articles, government websites, research studies, charity websites and news articles. Two key findings discovered through the research were that there is a general lack of awareness of what sex trafficking is and what the magnitude of the problem is here in Canada.

Educator: Laura Allan

Team Members: Alexa Stucke, Coleman Stucke



SYSTEMS MAP OF SEX TRAFFICKING IN CANADA



THANK YOU TO OUR PARTNERS & SPONSORS

THE INSTITUTE FOR COMMUNITY PROSPERITY

The Institute for Community Prosperity connects students with social impact learning through applied, community partnered research, creative knowledge mobilization, and systems-focused education. It is based at Mount Royal University, an undergraduate liberal arts institution in Calgary, Canada. The Institute designs and hosts learning experiences to help students lead transformative change in their communities.

RE-CODE

Re-Code is a project of the Montreal-based McConnell Foundation that supports Canadian universities and colleges to increase their social impact. Re-Code brings together individuals in the post-secondary sector to learn from each other and share social innovation practices toward a goal of improving wellbeing within their campuses and communities.

SKOLL CENTRE FOR SOCIAL ENTREPRENEURSHIP

Map the System is an initiative of the Skoll Centre for Social Entrepreneurship, based at the Saïd Business School, University of Oxford. The goal of the Skoll Centre is to maximize the impact of social entrepreneurship in transforming unjust or unsatisfactory systems or practices around the world in order to address critical social and environmental challenges.

THE TRICO CHARITABLE FOUNDATION

The Trico Charitable Foundation seeks to close gaps in society by provoking innovation and building capacity in social entrepreneurship.

