Enhancing KMb@UBC

MOBILIZING UBC RESEARCH IN THE POLICY REALM

THE UNIVERSITY OF BRITISH COLUMBIA

Policy Studio | UBC
Liu Institute for Global Issues

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CONTENTS

01. **Introduction**

The concept of Knowledge Mobilization or (KMb) has been at the center of recent academic, governmental and public debates. It has received the explicit support of Canadian governmental agencies such as SSHRC,[1] NSERC and CIHR, who have been elaborating on the fundamental role that science and knowledge play in modern society. Although there are some differences in the approach and goals of knowledge mobilization promoted by these agencies—including concepts such as knowledge transfer, knowledge translation, knowledge dissemination, knowledge uptake or broader impact. The agencies have in common the notion that knowledge can have a wider impact outside the traditional academic boundaries. Discoveries in all areas of knowledge have the potential to impact applied innovation, education, wellbeing, equity, economic growth, sustainability, and basically all areas of human enterprise.

It can be argued that knowledge is one of the fundamental elements to spur innovation along with people, infrastructure, and systems.[2] In one sense, the notion of knowledge mobilization aims at connecting existing research with the needs of stakeholders, whether that be the public or private domains. In a broader sense, however, knowledge mobilization also includes working with non-academic partners to co-develop knowledge for impact beyond the academy.

[1] For instance, SSHRC defines knowledge mobilization as: "The reciprocal and complementary flow and uptake of research knowledge between researchers, knowledge brokers and knowledge users—both within and beyond academia—in such a way that may benefit users and create positive impacts within Canada and/or internationally."

[2] According to Council of Canadian Academies, KMb has been referred to as a core element for explicit science policy.

Modern research universities are also exploring the most effective systems for supporting KMb efforts. A major driver for this is that national and international funding agencies now require research impact plans as part of grants, fellowships, and collaborative projects. Therefore, it is critical that KMb is an active part of a comprehensive strategy for research competitiveness. UBC has been recently recognized by Reuters as Canada's #1 most innovative university, is ranked #50 on the world stage,[3] and is well-positioned to extend its research strategies and services to include knowledge mobilization.

Finally, and most importantly, UBC President Santa Ono has recently expressed the need to engage or re-engage with the communities that our university serves, this includes First Nations, the City of Vancouver, the Province of British Columbia, Canada, and the world. During his installment ceremony, Dr. Ono said, "We will identify new opportunities to connect with and strengthen our communities. Here at UBC we understand that universities have a responsibility to forge strong connections with our communities." UBC is entering a new era of committed relationships with the wide spectrum of communities it serves, and knowledge mobilization is primed to serve as a catalyst to this engagement through research impact.

UBC has also expressed its commitment to knowledge mobilization reflecting KMb in two of the strategic priorities of UBC's forthcoming strategic plan. For example, knowledge mobilization objectives can be found in the "engagement and reciprocity" and the "creativity, innovation and risk-taking" draft strategies, that look at supporting collaboration with external partners.[4]

"
We will identify new opportunities to connect with and strengthen our communities. Here at UBC we understand that universities have a responsibility to forge strong connections with our communities.
"

— Dr. Santa Ono, UBC President

[3] Reuters Top 100: The World's Most Innovative Universities – 2016. http://www.reuters.com/article/amers-reuters-ranking-innovative-univers-idUSL2N1C406D

[4] Complete and updated information about the UBC Strategic plan can be found at: http://president.ubc.ca/strategic-initiatives/provide-your-input/

About the report

This report was commissioned to capture the knowledge mobilization activities being performed by UBC's academics in connection with the policy realm. This report represents a first attempt to understand the KMb phenomenon, its scope, challenges and opportunities. It is important to note that the cases and profiles presented in the following section constitute a small sample of UBC professors performing KMb activities. The participants in this study were initially identified by academic heads as leaders in KMb and were willing to work with the researchers.

Due to time and financial constraints, this project focuses on the policy realm generally. The Health sector deserves its own study and is outside of the scope of this project.

It is also important to mention that the practice of knowledge mobilization at UBC can be historically traced to some forms of applied research such as community-based research, action research, public scholarship and service learning. In the future, UBC could find ways to integrate these scholarly approaches into knowledge mobilization strategies.

The following sections of this report include a description of the methodology used to collect information from the participants concerning KMb activities, followed by 12 brief case studies, a synopsis of the challenges identified by participants, preliminary recommendations for a KMb unit at UBC, and finally some suggestions on future directions for research. A brief summary table and the KMb canvas v 2.0 Public Policy have been added in the Appendices.

Acknowledgements

UBC has also expressed its commitment to knowledge mobilization reflecting it in two of the draft strategic priorities of UBC's forth-coming strategic plan; supporting collaboration with external partners.

02. Methodology

A first exploration into knowledge mobilization at UBC involved inviting a broad range of academics to strategic design studio sessions organized by The Liu Institute's Policy Studio. The Policy Studio uses the strategic design method, which is a participatory process, rooted in user research, in which participants are guided to discuss, co-create, test, and propose resilient solutions to big-picture or systemic challenges. Policy Studio work involves co-creation tools, such as the KMb Canvas for Public Policy, that seek to engage participants in the whole process from problem definition to creative solutions. Our two strategic design sessions attracted a total of 25 professors and staff.

After two rounds of strategic design sessions, a smaller selection of interested participants were contacted in order to follow up with in-depth interviews. Each interested participant then constituted an individual case study. Researchers interviewed the participants and in some cases got access to reports, or websites with more information about a specific project which involved KMb activities.

Researchers aimed to include a broad selection of participants representing a wide variety of UBC disciplines impacting policy either directly or through the broader public.

The Policy Studio uses the strategic design method, which is a participatory process, rooted in user research, in which participants are guided to discuss, co-create, test, and propose resilient solutions to big-picture or systemic challenges.

03.   UBC Case studies

Rashid Sumaila

Dr. Rashid Sumaila specializes in Fisheries Economics at the Institute for Oceans and Fisheries - UBC School of Public Policy and Global Affairs. His current KMb project is the *OceanCanada* Partnership. It is an innovative, interdisciplinary initiative started in 2014 that includes academic and non-academic partners such as NGOs, businesses and government representatives. The project involves measuring Canada's stock in the three coastal regions, planning for the future and a KMb-specific component, aiming at the implementation of research knowledge to create change in industries, government agencies, and among the general public.

Concerning the complexities of integrated KMb projects (where Professors perform research activities while engaging non-academic stakeholders), he remarks, "It is challenging but not impossible to engage with policy makers and practitioners, but it requires time and effort like managing your course schedule and traveling nationally or internationally." However, KMb serves the competitive advantage of the university. "You improve your research while bringing novel and relevant ideas to the university. It also helps with obtaining research awards – nowadays the KMb component of funding proposals is very important, connects you with potential funders [...] stakeholders also support dissemination efforts through non-academic channels, it is very beneficial".

"You improve your research while bringing novel and relevant ideas to the university"

Walter Mérida

"We need to respond to sectoral needs rather [than] pushing solutions that individual professors are developing"

Dr. Mérida is currently serving as director of the Clean Energy Research Centre (CERC). CERC has been able to develop several partnerships around natural gas and energy innovation and has worked closely with NSERC. Dr. Mérida and his team have been able to put on successful workshops, centred on issues surrounding natural gas, which bring together academics, industry representatives and government agencies. Today, these partnerships have evolved into a consortium that integrates private companies and the BC provincial government, and has led to multiyear projects. He is successfully replicating a "workshop-to-consortium" format to improve public transportation.

As part of its KMb activities, CERC was able to engage the provincial government to fund the first natural gas futures conference. Regarding the current challenges of doing KMb, he recalls, "Discoveries are made in a space (open space in the mind)," this implies that Professors need to reconcile being in many places, wearing many hats, and doing a lot of administrative work. For Dr. Mérida and CERC members, KMb has been a platform for learning and testing innovative ideas. "You create a lot of new knowledge when you come together as a group. KMb has broadened my perspective: there is a lot more to problems, technologies and solutions," Dr. Mérida asserts.

Joerg Bohlmann

Dr. Bohlmann is a Professor in the Department of Forestry, and the Michael Smith Laboratories. He has extensive collaborations at the provincial and federal level where he has informed forestry risk assessment and forestry management topics. One example is the work around the mountain pine beetle epidemic that affected large swaths of forest in BC and Alberta and was able to reach the prairies. He considers KMb as an important part of his academic trajectory. KMb has led to unique research grants, and a closer relation to governmental researchers. He adds, "I'm on a weekly or monthly basis working together with someone in the BC Ministry of Forest, […] there is this completely seamless transfer of knowledge. This is a different model than the traditional model of research." Dr. Bohlmann also notes that KMb impacts policy and includes direct and indirect mechanisms, "The direct mechanism of policy impact [might be] where the policy connection is written into the grant; and the indirect mechanism is where it is not stated […] but still impacts policy because our primary collaborator is the government." In order to enhance KMb impact, Dr. Bohlmann adds, "The more we can do to enable direct collaborations with these partners who work in policy organizations the better."

"KMb made my work have relevance outside academia"

Penny Gurstein

Dr. Gurstein is the Director of UBC's School of Community and Regional Planning (SCARP). She is an experienced applied researcher looking at some of the most complex urban development topics in Vancouver, including understanding the impact of housing issues in communities. One of her recent examples of KMb work relates to mobilizing research in 2015, when there was media attention around the cost of housing, using the social media hashtag #donthave1million. The case allowed herself and other UBC Professors to engage in the pressing issue of housing in Greater Vancouver.

Dr. Gurstein is also an experienced scholar who successfully writes op-eds and engages with media. She adds, "Once you are in contact with the press—good press that are knowledgeable about the subject, then you could really have good conversations and get your ideas out." According to her perspective, universities could play a stronger role in KMb while looking at departments with important knowledge production on current and required topics/phenomena. This speaks to addressing and understanding how to reconcile research agendas with research needs outside academia.

"Academics have the luxury of thinking and working with [knowledge] and great ideas! What a privilege to communicate them!"

Tom Davidoff

Professor of Strategy and Business Economics at UBC's Sauder School of Business. Dr Davidoff has made over 300 media appearances, attended public fora and worked with policy makers to discuss Vancouver's housing affordability and property taxes.

One of his major and most recent KMb contribution is the "BC housing affordability fund proposal" which stems out of his own research on housing markets and the effects of taxes on demand and affordability. According to Dr. Davidoff, "It all started with a paper that explains where property taxes should be high and where they should be low," which sheds light to one of the most pressing economic and policy issues in Vancouver and BC.

Sauder's media experts connected him with journalists and he was able to meet as well as work with policy makers and other academics. Dr. Davidoff explains that some of the KMb challenges in the policy realm involve the time needed to craft a "proposal piece," as well as to personally communicate with experts in order to endorse a proposal. However, he adds, "We had the opportunity to discuss what the key drivers of affordability are in the province, we have been able to educate the population… I wouldn't trade it for the world."

"KMb could be part of 'giving back' or service to the public"

"[We need to be] spending the time to go out and understand what the stakeholders need to know"

Sean Smukler

Dr. Smukler is an Assistant Professor in the Faculty of Land and Food Systems. He worked with multiple groups in the United States, El Salvador and Honduras. These include governmental organizations, farmers and communities. The project centred on designing an economically and culturally viable agroforestry system in El Salvador. The work included many scientific tests but also relied on knowledge exchange (KE) between farmers in El Salvador and Honduras. He is currently funded by the BC Ministry of Agriculture to provide actionable research to the farmers of BC and he is applying strategies implemented in El Salvador.

KMb activities have a value in themselves apart from research. Dr. Smukler says "I take great pride that we spent a lot of time and energy we put into bringing the community together just to talk about these things. Even if [certain experiment had to change], just that activity of bringing the people together had positive outcomes for the farming community." KMb extension activities increase practitioner engagement, "They were very excited about the process [of pasture management], to see different options and feel empowered to selecting from those options.

Dr. Smukler affirms, "There is a huge need for [KMb] and knowledge extension at UBC," [putting resources] is an investment that will help us get those grants, build a reputation and make us more competitive.

Janette Bulkan

"I am determined to be the bridge to the public who will not otherwise hear the story"

Dr. Bulkan is an Associate Professor in the Department of Forestry. Her research encompasses forest fragility and good forest management practices. She has spent a considerable amount of time with the people of Guyana in South America helping to "build nationhood, community organization and understanding of a really complex environmental subject." Through her research and engagement with people and NGOs, she supports the protection of Guyana's forest. Which, as she mentions, "is very fragile and globally unique." While maintaining sustained, long-term work, she has been able to connect her research into action, impacting the public debate around deforestation and forest sustainability in this country. In particular, her work has served to promote a stricter adherence to responsible forest management practices by the government, international logging companies and the public.

Her research and KMb work at local and international scale, has brought her a sense of fulfillment because she uses her research to tackle the "issues that keep [her] up at night" and she remarks that although KMb work is complex, it is often part of an ethical public obligation. "Sometimes you have to make a sacrifice to do what is right."

Stephen Sheppard

"[Universities] need more social science evaluation that can capture the wider impact"

Dr. Sheppard is a Professor in the Faculty of Forestry and his research focuses on forest resource management, landscape planning, and public awareness around climate change issues. His current KMb project involves engaging youth on climate-friendly solutions. This includes using latest digital tools, visualization maps, student co-designed video games, and community visioning gatherings.

For his KMb projects, investing time in community engagement has been crucial. He adds, "You have to work with partners in communities: you're bound to miss a lot of important things if you are not working with partners." KMb gives you opportunities to understand that "established tools can be applied in a wider way. [We] also need more social science evaluation that can capture the wider impact," including inputs into decision making, change of perception, and the broad work of policy making.

Dr. Sheppard asserts, "Academics have an enormous privilege and opportunity, [Professors] have privileged knowledge that ordinary people or decision-makers will never go through... how can we [better] share this with the public?"

Benjamin Goold

A Professor in the Faculty of Law, Dr. Goold's career has been influenced by his work in UK and Canada. His area of expertise includes the role of technology, surveillance, and privacy in public institutions. His latest KMb work involves being a member of the board of the BC Privacy Commissioner, as well as serving as expert and performing research at security agencies. Some of this research involves performing ethnographic activities and building effective rapport with their members. He recalls, "You can't understand a [public safety organization] unless you understand the cultures of the people who are doing it." This requires a considerable amount of time, and "KMb needs to avoid the trap of quantity over quality," Goold reports as a current challenge. Also, he addresses the importance of writing to a non-academic audience, and brings the notion of knowledge translation as an important activity within the process of knowledge mobilization. He adds, "You have to think about how your published research can be understood and experienced by the people who were [participants] of it".

"KMb needs to avoid the trap of quantity over quality"

Karen Bakker

Dr. Karen Bakker is a Professor in the Department of Geography, researching environmental and economic geography. She is the Co-Director of the program on Water Governance and has ample experience with knowledge dissemination. Indigenous voices and perspectives are at the core of the project, which includes indigenous knowledge keepers and community members, water scientists, social scientists, and artists. One of her latest KMb works involves the development of the ongoing "Decolonizing Water project," an SSHRC multi-year funded project incorporating more than a dozen partners and focused on working with First Nations. The project goal is to create a prototype of an indigenous led community-based water monitoring initiative, rooted in indigenous law, and a practical expression of indigenous water governance.

A unique feature of this project is that it involves a knowledge translation group whose goal is to turn the research into materials that are accessible to a variety of different audiences. Dr. Bakker adds, "Because we have relationships with indigenous communities, it is very important to make sure that the knowledge and research process is accessible at all stages [...] it is a fundamental part of an ethical commitment." A unique and important perspective of the project is to mobilize back to granting agencies the way indigenous communities conceive knowledge and knowledge mobilization. This aims to influence and inspire policy and decision makers.

"None of this can happen
[...] in a good way, without
having strong relationships
which takes time to build"

"KMb by design is destined to go beyond echo chambers"

Allen Sens

Professor in the Department of Political Science, Dr. Sens specializes in International Security research and teaching. An important influencer of interdisciplinary collaborations, his teaching spans UBC's Faculty of Arts and he is an important advocate of the role of knowledge mobilizationin academia. One of his current KMb projects stems from an SSHRC grant on knowledge mobilization via radio podcasting. For this project, he developed and implemented a new model of podcasting called the 30-minute long-form podcast. The podcast is co-created between researcher, journalists and community partners. The project aims to find pathways for research dissemination towards the broader public and targeted groups. He adds, "[It is necessary] to reach the broader public in order to go beyond specific echo chambers." He also adds that it is important to have the conversation about impact assessment since "there is an opportunity for a leading research university to use KMb strategically to advance public knowledge."

Sens questions, "How do [universities] become the 'go-to place' for a person who has heard something that worries them or excites them that connects to them directly? KMb needs to be the gateway." Universities can develop models involving interdisciplinary oriented communities of practice that appeal to researchers who are willing to contribute to knowledge mobilization. "KMb is an activity that needs to be kept up," he adds.

Michelle Stack

Dr. Michelle Stack is a Professor in the Department of Educational Studies in the Faculty of Education. Her research examines how academics and scholar practitioners can expand conversations about media through media engagement. She also conducts research focused on university rankings and equity in education. One of her latest KMb projects involves community-based research with secondary schools. Her approach involves asking students to be "co-researchers," while going on a journey of using tools (e.g. Photovoice) to capture images and reflections about belonging and exclusion at school. This project led to Professor Stack co-presenting with youth researchers on a radio show, to school leaders and at a provincial public health conference. "Sharing knowledge and learning from each other is about relationships and that requires listening. You don't need me to speak for them, but I can be part of making room for them to be heard through collaborative KMb efforts", she asserts.

She refers that "[KMb] takes time. My graduate students are always shocked at how long it takes to write a publishable Op-ed or to do a podcast."

To be successful requires respect and relationship building with intended audiences for KMb efforts. It is easy to tell people "Here is my knowledge use it, but we know that doesn't work and that this can do harm, especially when the knowledge of marginalized communities is dismissed in the process."

"The university's job is to expand public debates through research. An academics' job is to take risks to push those debates"

04.   Challenges

The following represents a compilation of ideas and comments that participants expressed when researchers addressed questions with reference to current challenges in Knowledge Mobilization, and how to support KMb strategies and activities at UBC.

1. Lack of incentives for KMb

a. Currently KMb is something Professors do off the side of their desk.
b. KMb is not yet part of the tenure and promotion discussions. Is not yet recognized in most faculties.
c. Professors are already doing many activities as part of their academic endeavours. Why add another thing to already busy professors?
d. UBC could provide mechanisms whereby Professors are acknowledged and rewarded while doing work.
e. Some KMb activities can be considered negative, not zero, but negative, since you are not devoting to your own research.

2. Capacity for KMb needs to be built

a. KMb could involve team work with colleagues from other departments. And we need more contacts across departments.
b. Universities say they care about KMb but there are no current structures to actually support it. Capacity building is needed.
c. Professors are not trained to speak with media and journalists.

d. Communities can feel used if they are not an active part of the research, or don't receive the outputs of the research.
e. Some Professors might not be good at KMb and others may not have had proper training in KMb.

3. Lack of resources to maintain KMb

a. Lack of money to do effective KMb is the biggest challenge.
b. Having a KMb unit at UBC is not sustainable without adequate resources.
c. Budgetary and physical constrains exist. There are no proper institutional grant allocations to perform KMb activities.

4. KMb is usually viewed too narrowly

a. We tend to conflate KMb and publicity, but they are not the same.
b. A university that professes to engage in KMb and doesn't have a local as well as a global focus, will be missing a big opportunity.
c. Academics must unlearn. Why do we qualify some forms of knowledge as "traditional," whereas we called what we produce just "knowledge"?
d. The difficulty of putting social science into a natural science-derived framework for KMb is sometimes exacerbated. There is a particular emphasis on natural and engineering science.
e. It is important to recognize the Professors role as researcher, they are usually limited in terms of where they can have impact.

5. KMb takes time

a. UBC needs to recognize that serious KMb implies time, sometimes more than the timeline expressed on paper.
b. To do quality KMb research with the community (co-production or integrated models), it involves time, it cannot be done quickly. Time needs to be taken to build relationships.
c. KMb activities require time, e.g. the amount of work that goes into preparing to meet with a Minister is significant and its get recorded nowhere.

6. There needs to be a culture of KMb

a. Some traditional departments are not interested in KMb, recently created departments are more open.
b. University culture still rewards individual-focused mentality.
c. We should be allowed to hire applied researchers or professionals with excellent communication/engagement skills, there are administrative barriers to it.
d. Some departments think that KMb activities destroy research productivity.

7. KMb is an area that needs research

a. We must assess the impact of KMb activities. UBC needs to have the conversation about impact.
b. KMb might sometimes not work. You might not get a result. It involves not getting discouraged and go back and try again.
c. Some types of impact do not have permanence; same as "progress" that might not be consistent.
d. Funding agencies ask Professors to predict what the very specific outcomes will be and Professors might not predict all of these.
e. UBC should conduct a systematic study to determine the indicators to measure impact and the role that Professors play in it.
f. Sometimes if you are counter to political agendas, politicians might not be willing to listen.

05. Recommendations

The KMb unit, an innovation strategy for UBC

A centralized KMb unit is an innovation strategy for making UBC more connected inside and outside, more aware of its current and potential research impacts and more recognized for them. The KMb unit will increase UBC's research competitive advantage.

The UBC KMb unit brokers.

- operates as a gateway of access between UBC and other communities/ general public;
- works as an interdisciplinary, cross-faculty, cross-research group partnerships broker;
- brokers partnerships between communities at UBC and communities outside UBC; and
- operates as a connector for currently existing knowledge mobilization groups and personnel, enhancing cross-pollination, synergy and innovation.

The UBC KMb unit measures.

- measures the broader impacts of UBC research, scholarly activities and networks on different sectors; and
- provides reports on UBC research impact and on the impact of KMb faculty and groups at UBC.

The UBC KMb unit trains.

- builds capacity (teaching and training) for KMb in professors and students;
- trains and advises on KMb/KT plans for grant proposals at all levels; and
- trains and builds capacity for research utilization in partnerships with different stakeholders.

The UBC KMb unit enhances knowledge mobilization culture and systems.

- finds and creates unique funding opportunities to support KMb work;
- creates and implements new rewards and incentives to recognize KMb work;
- advises on KMb/KT evaluations for awards, promotion and tenure;
- implements innovative ways to socialize the importance of KMb for research impact among graduate students and faculty;
- reviews institutional information about current UBC research indicators, and international benchmarks to fold into the process;
- prototypes and test ideas with pilot groups about UBC KMb Unit programming, structure, indicators (metrics), rewards and programs;
- will propose a co-created model to the Vice-President Research and Innovation;
- works in coordination with UBC Public Affairs, communication areas and research services; and
- will work alongside Research Impact Canada, a pan-Canadian network of research universities, and other KMb experts.

The UBC KMb unit researches.

- researches and creates metrics frameworks for research impact;
- researches and creates new knowledge mobilization institutional and capacity development strategies;
- publishes scholarly work, frameworks, tools and datasets; and
- advances the state-of-the-art of KMb.

The UBC KMb unit could be structured as "hub+spoke".

The proposed KMb unit could be structured as a "hub+spoke" model. A centralized UBC knowledge mobilization unit ("hub") could work together with new and existing faculty or grant-based knowledge brokers and networks ("spokes"). The centralized hub would serve the above functions and will also serve to connect the other KMb/KT/KE groups in order to fulfill the above objectives.

The UBC KMb unit at a glance

The UBC KMb Unit:

- works with Professors and graduate students to prepare them to excel at KMb plans for grants;
- tracks UBC's research impact;
- is a gateway of contact for internal and external partnerships: front door; works in coordination with UBC Public Affairs, media and communication strategies;
- operates and creates a system of incentives and rewards for UBC to excel at knowledge mobilization;
- develops and implements cutting edge research in KMb;
- is connected to world-leading institutions committed to broader impact and supports best practices;
- strengthens UBC's international position as global research partner.

06.   **Future Research**

The research conducted for this report has provided an in-depth look at KMb activities being performed by UBC faculty with specific emphasis placed on a single, relevant project of theirs which aimed to influence policy, either directly or indirectly. What is needed now is to increase the number and variety of participants to encompass the wider diversity of UBC researchers, staff in key related areas, as well as the broader public.

We aim to create a survey that will provide quantitative data about the features of KMb activities, including stakeholder engagement types, partnerships, tools for mobilizing and resources available. The survey could be deployed across UBC channels throughout all faculties. Our study has identified that academic disciplines have different conceptions of KMb and a range of needs to be met. A well-constructed survey administered to all faculty will provide a clearer description of KMb activities occurring at UBC and differences across faculties.

The types of data KMb deals with are a combination of qualitative and quantitative, including anecdotal data, network descriptions and measurements of research outputs. Not only can state-of-the-art data visualization be employed to understand these data, but there is a need to explore innovative ways of combining these types of data to communicate relevant information about UBC's impact through research.

A further research opportunity looks at a comprehensive investigation of the different types of impact measurements that currently exist (e.g. benchmarks, frameworks, theories of change) in order to inform effective indicators for UBC's broader research impacts.

Finally, further consultation is needed to define and test the functions of the KMb unit at UBC. Faculties at UBC have differing views and expectations of what constitutes useful KMb services. Consultations will make sure the future KMb unit serves our faculty, researchers and non-academic communities effectively.
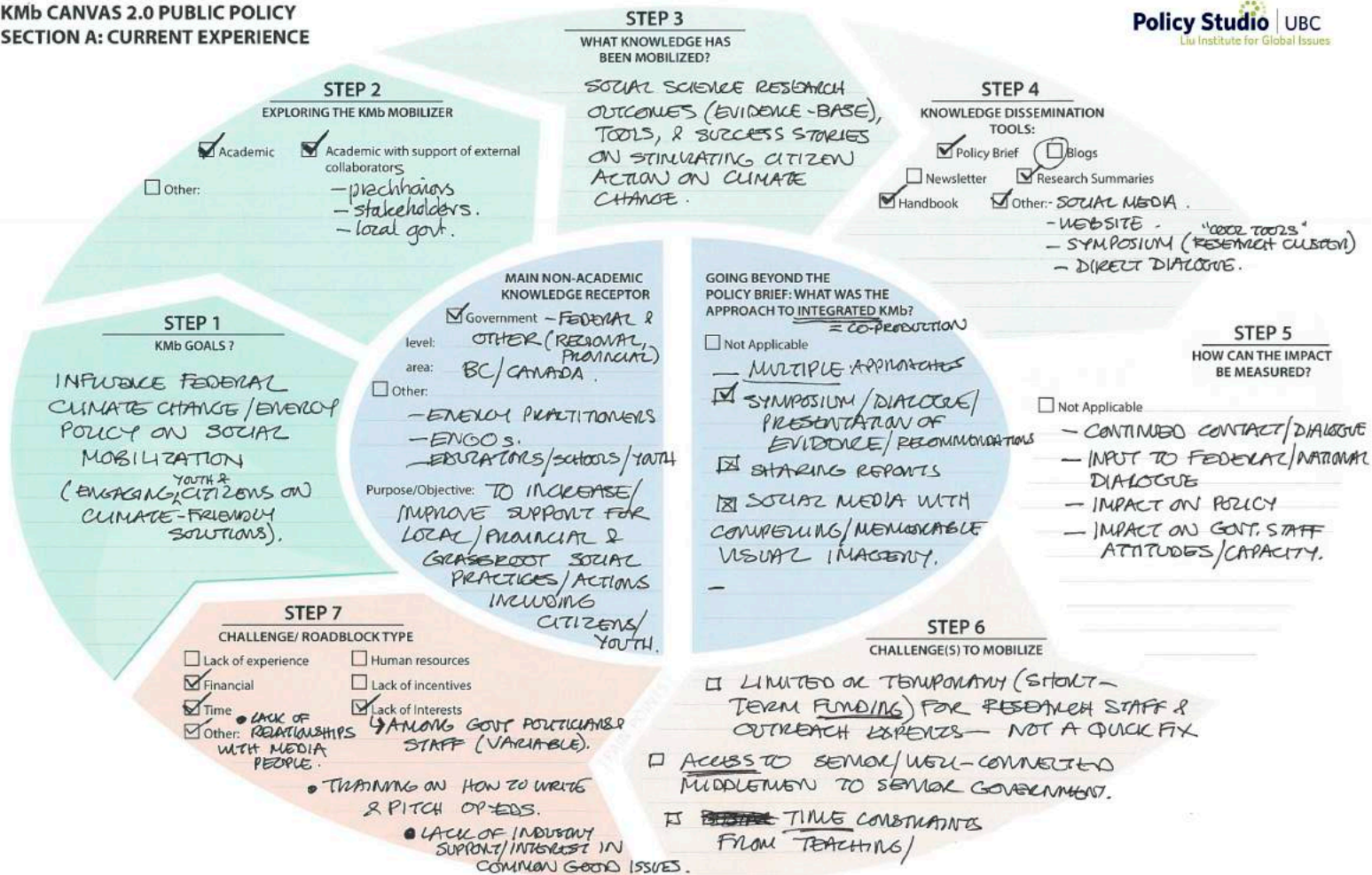
07.   Appendices

APPENDIX A: Overview of participants' projects and profiles

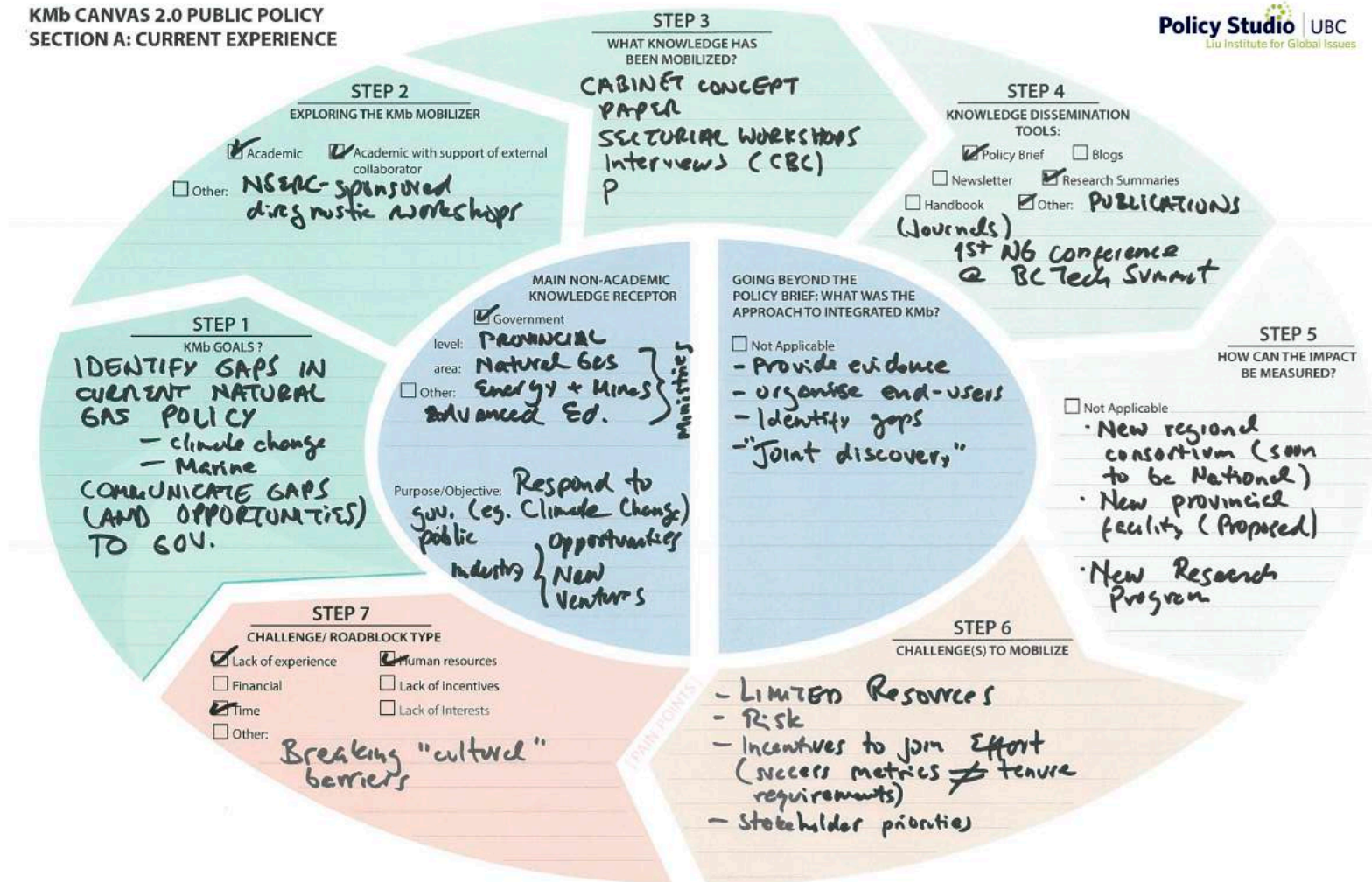| Professor	Faculty / Institute	Rank	PARTNERSHIPS			Tools to mobilize / mobilization efforts	Project
			Acad	Gov	Public		
Rashid Sumaila	Institute for the Oceans and Fisheries	Professor	x	x	x	Public lectures; Presentation for government officials; Documentary-style movies; Interdisciplinary meetings	*OceanCanada* Partnership
Walter Mérida	Mechanical Engineering	Professor	x	x	x	Conference-to-consortium method; plain language research summaries	Natural Gas Futures
Joerg Bohlmann	Forestry / Michael Smith Laboratories	Professor	x	x		Knowledge broker situated in related government agencies; Open dialogue with governmental researchers	Forest Genomics
Penny Gurstein	Community and Regional Planning	Professor	x	x	x	Disseminate information through the press; Op-ed; Research along with practitioners	Housing in Vancouver
Tom Davidoff	Economics / Sauder	Professor	x	x	x	Establishing expert consensus; Op-ed; Radio appearances; TV appearances; Support on legislation crafting	Taxing housing in Vancouver
Sean Smukler	Land and Food Systems	Assistant Professor	x	x	x	Participatory action research; Knowledge exchange, government and farmers; Land grant research	Salvadorean agroforestry system
Janette Bulkan	Forestry	Assistant Professor		x	x	Developing a support group (public) to Forest sustainability issues; UBC's Next 100 Years Profile	Protecting Guyana's forests
Stephen Sheppard	Land and Food Systems	Professor	x	x	x	Climate change preparedness checklist; Community visioning; Video games	Climate change preparedness
Benjamin Goold	Law	Professor		x	x	Advisory board of the Privacy Commissioner; Case citations; Expert reviews	Public security organizations
Karen Bakker	Geography	Professor	x	x	x	Two-eyed seeing; incorporate traditional knowledge; Land-based research; Community directed-based research; Full access to research during study; Exchange of gifts; Knowledge mobilization directed at funding agency; Whitepaper series; Website	Decolonizing water
Allan Sens	Political Science	Professor	x		x	30 minute long-form podcast; Research in KMb; Journalist and NGO's collaborations	KMb through radio podcasting
Michelle Stack	Education	Associate Professor	x	x	x	Photovoice; Op-eds; Radio columnist; Collaborative media production	Collaborative action research and media production aimed at creating democratic and equitable schools and services. Collaborative media engagement with graduate students, alumni and colleagues aimed to expanding research-based public policy conversations.

APPENDIX B: KMb Canvas v 2.0 Public Policy

The following represents examples of the KMb Canvas 2.0 as filled by Studio participants.

KMb CANVAS 2.0 PUBLIC POLICY
SECTION A: CURRENT EXPERIENCE

Policy Studio | UBC
Liu Institute for Global Issues

STEP 3
WHAT KNOWLEDGE HAS
BEEN MOBILIZED?

CABINET CONCEPT
PAPER
SECTORIAL WORKSHOPS
Interviews (CBC)
P

STEP 2
EXPLORING THE KMb MOBILIZER

☑ Academic   ☑ Academic with support of external
              collaborator
☐ Other: NSERC-sponsored
         diagnostic workshops

STEP 4
KNOWLEDGE DISSEMINATION
TOOLS:
☑ Policy Brief   ☐ Blogs
☐ Newsletter   ☑ Research Summaries
☐ Handbook   ☑ Other: PUBLICATIONS
(Journals)
1st NG Conference
@ BC Tech Summit

STEP 1
KMb GOALS?

IDENTIFY GAPS IN
CURRENT NATURAL
GAS POLICY
— climate change
— Marine
COMMUNICATE GAPS
(AND OPPORTUNITIES)
TO GOV.

MAIN NON-ACADEMIC
KNOWLEDGE RECEPTOR

☑ Government
level: PROVINCIAL
area: Natural Gas
         Energy + Mines } Ministries
☐ Other: Advanced Ed.

Purpose/Objective: Respond to
gov. (eg. Climate Change)
public
industry } Opportunities
          New
          Ventures

GOING BEYOND THE
POLICY BRIEF: WHAT WAS THE
APPROACH TO INTEGRATED KMb?

☐ Not Applicable
- Provide evidence
- Organise end-users
- Identify gaps
- "Joint discovery,"

STEP 5
HOW CAN THE IMPACT
BE MEASURED?

☐ Not Applicable
· New regional
  consortium (soon
  to be National)
· New provincial
  facility (Proposed)
· New Research
  Program

STEP 7
CHALLENGE/ ROADBLOCK TYPE
☑ Lack of experience   ☑ Human resources
☐ Financial   ☐ Lack of incentives
☑ Time   ☐ Lack of Interests
☐ Other:
Breaking "cultural"
barriers

STEP 6
CHALLENGE(S) TO MOBILIZE

- LIMITED RESOURCES
- Risk
- Incentives to join Effort
  (success metrics ≠ tenure
  requirements)
- Stakeholder priorities