



**2017
2018**

**ANNUAL
MANAGEMENT
REPORT**



International Research Consortium
on the Governance of Large
Infrastructure Projects

KHEOPS

International Research Consortium on the Governance of Large Infrastructure Projects
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Texts and editing

Alexandra Prohet and Nathalie Drouin

DIRECTOR'S MESSAGE



Dear Members,

I am very proud to present the second annual report (2017–2018) released by KHEOPS – International Research Consortium on the Governance of Large Infrastructure Projects. The past year's accomplishments, which are highlighted in this report, stem from the ongoing efforts of our team, which, once again, has succeeded with little means and significant drive in launching KHEOPS. Along with partners, collaborators, research and students, the team worked to definitely set KHEOPS on a path to expansion.

The attainment of a number of the objectives set out as part of the consortium's 2016–2019 strategic planning is tangible evidence of KHEOPS's reach. Based on best practices, its governance framework is now firmly rooted in its policies and processes. The consortium is also led by a board of directors and scientific committee that provide support in the development of its activities. This past year was particularly full, with the initiation, funding and management of research projects. We also invested significant effort in consolidating scientific partnerships that have produced results. The network of KHEOPS researchers has exploded in terms of number. KHEOPS now ensures its visibility and outreach—along with that

of its scientific partners—through its comprehensive communications plan.

Many great initiatives and achievements were successfully carried out, including KHEOPS's official launch on September 18 with over 100 guests, senior officials and stakeholders in the infrastructure ecosystem and research community in attendance. A new form of collaboration with key industrial stakeholders also emerged through roundtables on promising research themes such as the implementation of autonomous electric transportation and the development of green and grey infrastructures against flood threat. In addition, KHEOPS continued to be present at leading international research conferences. We would like to thank the members of the KHEOPS community, our scientific partners and the members of the scientific committee, who make research on the governance of major infrastructure projects possible, feasible and successful.

Despite excellent news on the renewal of our agreements with certain partners and new research collaborators, the consortium's financial situation remains fragile. Indeed, the funds that are available do not support the acquisition of the resources KHEOPS requires for the intended deployment of its activities. To consolidate our financing, we are focused on the addition of new partnerships.

In closing, I would like to thank the members of the board of directors of KHEOPS for their sustained presence and commitment. It is important to recognize their constructive support and especially the invaluable contributions of Rémi Quirion, Québec's chief scientist, and the Fonds de recherche du Québec. We are very grateful. Of course, I must also thank the consortium's assistant director Alexandra Prohet for her exceptional work and tireless support. Our small team welcomed communications officer Sandrine Cadet and research project coordinator Charlotte Alix-Séguin, who have proven to be driven and rigorous new recruits I must also thank them for their hard work.

We are already looking forward to sharing the outcomes of the activities undertaken this year. Until then, we hope you enjoy this edition of our management report.

Nathalie Drouin

A handwritten signature in black ink, appearing to read 'Nathalie Drouin', with a long, sweeping underline.



www.kheops.ca



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STATEMENT ON THE RELIABILITY OF DATA

As Executive Director, I am responsible for the results and information contained in this Annual Management Report. This responsibility includes ensuring the reliability of the information and data presented here in.

The Annual Management Report 2017-2018 of KHEOPS International Research Consortium on the Governance of Large Infrastructure Projects accurately describes the mission, values and strategic goals of the organization.

It presents its objectives and their associated outcomes. I declare that the information contained in this Annual Management Report is accurate and reliable and corresponds to the situation as it existed on March 31, 2018.

The Executive Director

A handwritten signature in black ink, appearing to read 'Nathalie Drouin', with a long horizontal stroke extending to the right.

Nathalie Drouin

INTRODUCTION

KHEOPS's 2017–2018 annual management report covers the period of the fiscal year from April 1, 2017, to March 31, 2018. This document is part of the accountability process prescribed under the Canada Not-for-Profit Corporations Act.

The report is divided into three main sections. The first section follows the Executive Director's message and a summary of the year's highlights, along with an overview of the consortium.

The second contains financial data and the third and last part recounts the actions led under the strategic plan. A list of KHEOPS's partners and the annexes conclude the report.



HIGHLIGHTS OF 2017-2018

- **Annual general meeting** to create KHEOPS – September 14, 2017
- **Official launch** of KHEOPS – September 18, 2017
- **Launch of the video** “L’approche KHEOPS en images” – September 18, 2017
- **Launch of a call for proposals** as part of the FRQSC's Concerted Actions program – November 15, 2017
- **Editing and release** of the first video in the Research Glimpse Series – November 9, 2017
- **Launch of KHEOPS's bilingual (French-English) website** – February 20, 2018
- Expansion of the community:
 - **57 researchers**
 - **11 students**
 - **5 new scientific partners**
 - **2 new collaborator-members**
- Creation of two **roundtables**
- Development of the **2018–2019 knowledge mobilization program**

1.

PRESENTATION OF KHEOPS

KHEOPS: AN OVERVIEW

- KHEOPS is an international and interdisciplinary research consortium founded in 2016. It is registered under the Canada Not-for-Profit Corporations Act.
- KHEOPS supports innovation for optimal societal integration of major infrastructure projects through the development of leading-edge knowledge.
- KHEOPS provides public and private sector organizations in Canada and Québec with access to a network of senior researchers from Québec, Canadian and international universities.

THE BIRTH OF AN ADVENTURE

At the end of her term as Associate Dean of Research in the School of Management at UQAM, Nathalie Drouin, who is also a professor in the Master's program in project management, found herself thinking about starting up a bold, ambitious project. In the summer of 2015, an Australian colleague from the University of Technology Sydney (UTS), who was visiting Montréal, suggested that she consider establishing a Canadian centre of excellence in research on large infrastructure projects. Such a centre could be the North American hub of a developing network that already included similar initiatives on several continents including Oceania, Europe and Asia. In December 2015, Drouin flew to Sydney where she presented to colleagues at UTS a first draft of the mission, vision, and preliminary structure of the entity that would later become KHEOPS, at the same time strengthening her partnership with her Australian colleagues.

In Canada and abroad, the context is more than favourable for the deployment of this type of initiative. Indeed, here and elsewhere, the existing infrastructure stock is not only structurally deficient, but functionally obsolete, requiring major work to continue to provide everyday services to the population and improve quality of life, while contributing to the economic development of society. In Québec and in Canada, the various levels of government have understood this, announcing major investment in infrastructure for the coming years.

This was the context when Nathalie Drouin met with a number of key stakeholders in Québec and Canada to assess their interest in contributing to the creation of a research infrastructure on the governance of large projects, which would offer a renewed and innovative approach. She saw a need for the development of scientific knowledge that would help stakeholders in the infrastructure ecosystem to make sound decisions, while supporting innovation.

The Fonds de recherche du Québec, UQAM and the City of Montréal were the first to commit to supporting the initiative led by Nathalie Drouin. The partners then agreed on the legal form that would be best for the newly minted consortium. And on June 21, 2016, KHEOPS International Research Consortium on the Governance of Large Infrastructure Projects was officially registered under the Canada Not-for-Profit Corporations Act. The KHEOPS adventure could now begin.

MISSION

The mission of KHEOPS is threefold:

- To support the development of leading-edge knowledge on the governance of large infrastructure projects in Québec and Canada by pooling multidisciplinary and multisectoral expertise.
- To adopt a sustainable, socially responsible perspective as a complement to the classic approach for analyzing large infrastructure projects.
- To support decision-making by key infrastructure development stakeholders in Québec and Canada.

VISION

- To become a centre of research excellence and a forum for cooperation between experts, decision-makers, researchers and students in order to improve the societal integration of large infrastructure projects.

VALUES

Three values lie at the heart of KHEOPS's actions and are upheld by its team. These values are:

- **Excellence**
Contribute to scientific development by building on criteria for research excellence.
- **Ethics**
Respect and promote the principles of ethics and integrity in research and in governance.
- **Commitment**
Fulfil our commitments toward our partners and scientific collaborators, while serving the community.



TEAM

This past year, KHEOPS team welcomed new members. In May 2017, KHEOPS recruited a new resource to ensure the dissemination and development of its activities and those of its research community members. **Sandrine Cadet** was hired as a communication officer. She is mandated to ensure KHEOPS's visibility and outreach and promote the consortium's activities. She also plays an active role in the development and organization of the events hosted by KHEOPS. Since September 2017, **Charlotte Alix-Séguin** has worked as the consortium's project coordinator. She handles all the administrative follow ups of research projects. KHEOPS welcomes them both!



Nathalie Drouin
Executive Director



Alexandra Prohet
Assistant Director



Charlotte Alix-Séguin
Project Coordinator



Sandrine Cadet
Communication Officer

2.

FINANCIAL RESOURCES

*Operations and changes in net assets

Fiscal year ending March 31st	2018	2017
Income		
Contributions	\$ 353 437	\$ 206 283
Other revenue	1 012	67
	<u>354 449</u>	<u>206 350</u>
Expenses		
Research activities	90 161	-
	<u></u>	<u></u>
Operations		
Salaries and benefits	165 797	132 698
Professional fees	15 204	9 513
Administration fees	82 275	52 259
	<u>263 276</u>	<u>194 470</u>
	<u>353 437</u>	<u>194 470</u>
Excess of revenue over expenses	1 012	11 880
Net assets, start of the period	11 880	-
	<u></u>	<u></u>
Net assets, end of the period	<u>12 892</u>	<u>11 880</u>

* The complete set of audited financial statements is available upon request.

3.

ACTIVITIES AND ACHIEVEMENTS

This third section of the Annual Management Report describes the activities and achievements resulting from the actions carried out by KHEOPS in 2017-2018 in relation to its strategic plan, which also includes an action plan. In the summer of 2016, the KHEOPS team held a three-day retreat during which a strategic planning process was developed that led to the production of a strategic plan and its associated action plan. The creation of the two plans (strategic and action) is the cornerstone of the consortium's implementation and establishment. These plans will govern the organization of KHEOPS's activities for the next three years. They are designed to be functional and feasible, given the resources available to the consortium. The strategic plan and its action plan allow KHEOPS to operate in a rigorous and realistic manner, and in accordance with the values of ethics, commitment and excellence upheld by the KHEOPS team. On January 13, 2017, the strategic and action plans were presented to the administrators during the first meeting of the Board of Directors of KHEOPS.

The strategic plan, in combination with its action plan, includes 3 overarching goals:

1. Establish KHEOPS as a centre of excellence;
2. Support the development of leading-edge research on the governance of large infrastructure projects;
3. Provide visibility and outreach for KHEOPS and its scientific collaborators.

Each of these goals encompasses one or more objectives, each of which involves a set of actions to be undertaken over the next three years (i.e. between now and 2019). The table on the following page summarizes the progress that has been made toward accomplishing these actions and objectives.

In this second fiscal year, KHEOPS and its team took giant steps forward. Objectives 1, 5 and 7 of the consortium's strategic plan were attained. With regard to the four remaining objectives, the actions undertaken are progressing, despite the consortium's limited resources. In other words, the outcome of the past year is very positive and supports KHEOPS's successful launch.



GOAL 1 : ESTABLISH KHEOPS AS A CENTRE OF EXCELLENCE

1 - Establish and implement a governance framework in accordance with best practices	Develop governance policies and processes	Completed
	Create and set up internal bodies	Completed
	Develop a calendar of legal obligations	Completed
2 - Define the service offering	Develop a range of specialized services for researchers and organizations	In progress
	Monitor the quality of services delivered	In progress
3 - Secure funding	Confirm funding from 2 or 3 major partners	In progress
	Sign memoranda of understanding with universities	In progress

GOAL 2 : SUPPORT THE DEVELOPMENT OF LEADING-EDGE RESEARCH ON THE GOVERNANCE OF LARGE INFRASTRUCTURE PROJECTS

4 - Adopt research programming that is innovative and useful for partners	Identify research needs	In progress
	Propose and approve research programming	In progress
	Have the programming adopted by the Board	Pending
	Create research alliances/collaborations with industry experts and scientific partners	In progress
5 - Fund research projects	Develop a research funding model	Completed
	Launch calls for projects	Completed
	Negotiate and draw up contractual agreements	Completed
	Support KHEOPS-funded researchers	Completed
6 - Facilitate access to existing knowledge	Develop knowledge mobilization services and activities	In progress
	Set up an information monitoring service	In progress
	Consider the possibility of developing a database	Completed
	Hire the necessary human resources (knowledge broker, information monitoring officer)	Pending

GOAL 3 : PROVIDE VISIBILITY AND OUTREACH FOR KHEOPS AND ITS SCIENTIFIC COLLABORATORS

7 - Develop and implement a communication plan	Analyze the context and identify the target, objectives and key messages	Completed
	Choose the communication methods	Completed
	Define content, establish a time frame & monitor the results	Completed



STRATEGIC GOAL NO. 1

Establish KHEOPS as a centre of excellence

OBJECTIVE 1

ESTABLISH AND IMPLEMENT A GOVERNANCE FRAMEWORK IN ACCORDANCE WITH BEST PRACTICES

Actions to be taken	Status
▪ Develop governance policies and processes	▪ Completed
▪ Create and set up internal bodies	▪ Completed
▪ Develop a schedule of legal obligations	▪ Completed

ACHIEVEMENTS AND COMMENTS

The KHEOPS team fulfilled the first objective of its 2016–2019 strategic plan, i.e. to introduce and implement a governance framework based on best practices. Indeed, KHEOPS adopted and operationalized its policies and governing bodies. In addition to its board of directors, the consortium includes a scientific committee who is responsible for supporting the executive team in the deployment of research and knowledge mobilization activities (program definition, project review, dissemination, transfer, etc.). Since KHEOPS has only one major partner to date (CDPQ), it chose to delay the creation of the major partners committee, as set out in its bylaws.

The scientific committee is made up of KHEOPS's executives as well as six representatives from the consortium's scientific partners: one representative from the Centre interdisciplinaire de recherche en opérationnalisation du développement durable (CIRODD), the Interuniversity Research Centre on Enterprise Network, Logistics and Transportation (CIRRELT), the Land Transport Infrastructures, Ecosystems and Landscapes (ITTECOP) program, the Quebec Maritime Network (RQM) and Université de Sherbrooke, as well as an international expert in major projects who is a member of the KHEOPS community.

The committee held its first meeting in November 2017 to begin its mandate. KHEOPS also held its annual general meeting to create the consortium on September 14, 2017. The event was the opportunity for KHEOPS to present its first activity report to its members and appoint the members of the board of directors (five administrators) and observers. The board of directors held two meetings in the last fiscal year.



BOARD OF DIRECTORS

ADMINISTRATORS

Serge Beaudoin

Manager, Business Partnership Development | *Université de Sherbrooke*

Nathalie Drouin

Executive Director | *KHEOPS*

Magda Fusaro

Rector | *Université du Québec à Montréal*

Catherine Mounier

Vice-Rector, Research and Innovation | *Université du Québec à Montréal*

Rémi Quirion

Chief Scientist of Québec | *Fonds de Recherche du Québec*

OBSERVERS

Serge Auclair

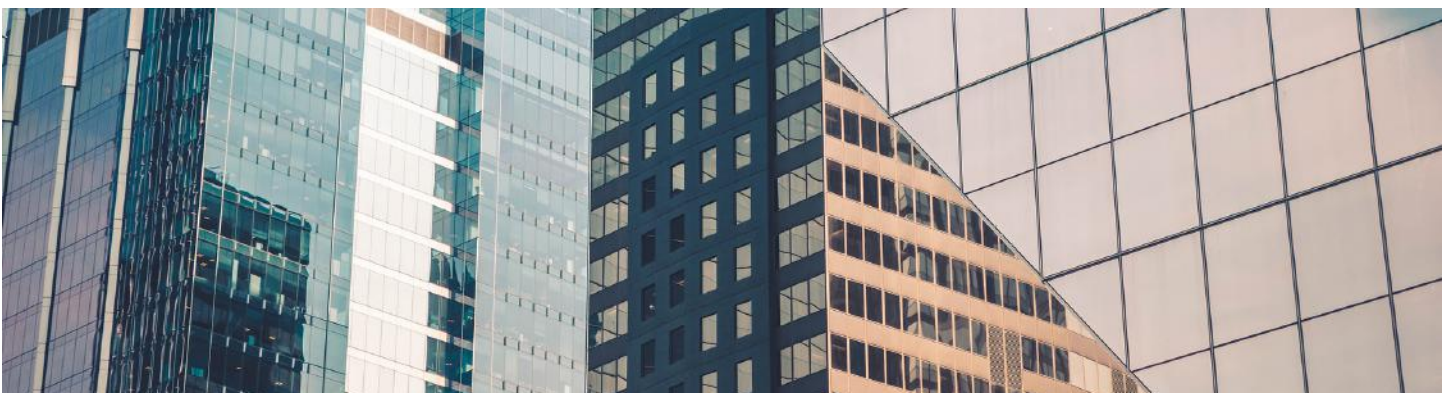
Vice-President, Strategy and Human Resources | *Port de Montréal*

Guy Laroche

Director, Office of Capital Works | *Ville de Montréal*

Alexandra Prohet

Assistant Director | *KHEOPS*



SCIENTIFIC COMMITTEE

MEMBERS

Claude Comtois

Director, Theme Sustainable and intelligent shipping | *Réseau Québec Maritime*

Teodor Gabriel Crainic

Director, Intelligent Transportation Systems Laboratory | *CIRRELT*

Nathalie De Marcellis-Warin

President and Chief Executive Officer | *CIRANO*

Nathalie Drouin

Executive Director | *KHEOPS*

Geneviève Dufour

Associate Professor, Faculty of Law | *Université de Sherbrooke*

Nicolas Merveille

Co-chairholder of the International Life Cycle Chair | *CIRAIG*

Ralf Müller

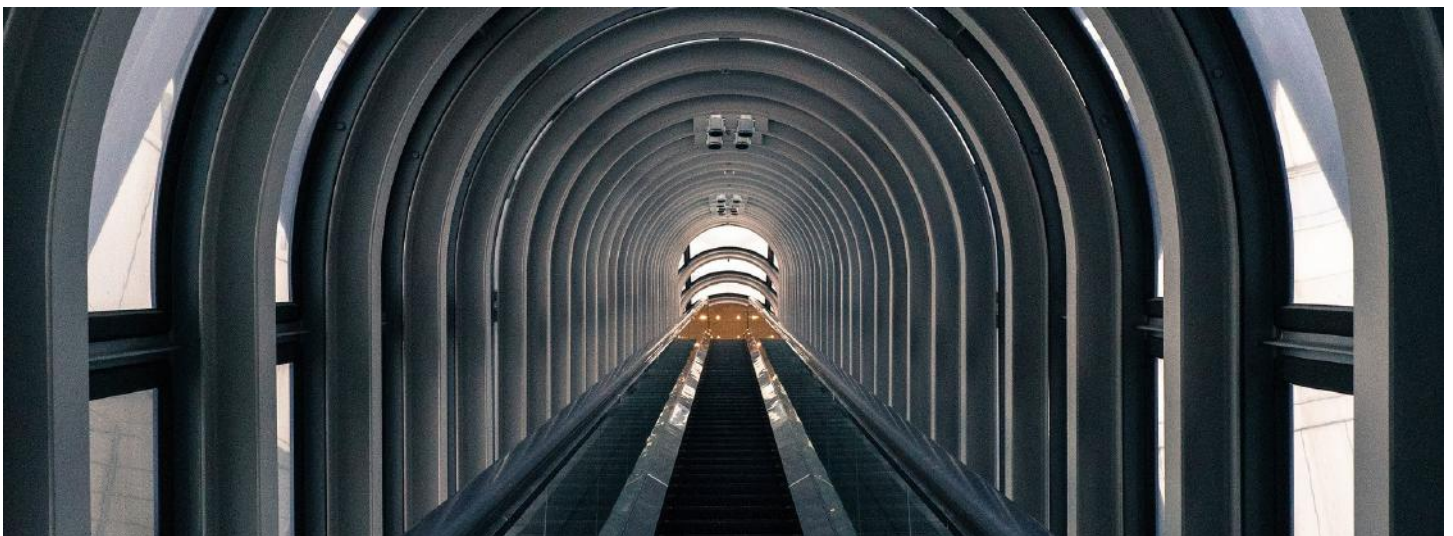
Professor, Department of Leadership and Organizational Behavior | *BI Norwegian Business School*

Alexandra Prohet

Assistant Director | *KHEOPS*

Bruno Villalba

President Science Council | *ITTECOP Program*



OBJECTIVE 2

DEFINE THE SERVICE OFFERING

Actions to be taken	Status
<ul style="list-style-type: none"> ▪ Develop a range of specialized services for researchers and organizations 	<ul style="list-style-type: none"> ▪ In progress
<ul style="list-style-type: none"> ▪ Monitor the quality of services delivered 	<ul style="list-style-type: none"> ▪ In progress

ACHIEVEMENTS AND COMMENTS

The KHEOPS team invested considerable efforts to reach the two other objectives of the first strategic goal, leading to a number of achievements including the development of several services. Indeed, the second objective aims to create a range of relevant and quality services. While the extend of the desired service offer has been set out in theory, KHEOPS is not currently able to operationalized all of the identified services due to a lack of resources. Choices were therefore made to prioritize the development of specific services. For example, since the consortium cannot provide its community with monitoring services without hiring a dedicated resource, KHEOPS decided to focus on research project funding during year 2. Last year, five research projects were developed. In 2017–2018, two new projects were added based on the research needs of sector partners. Two roundtables to launch emerging research projects were also created to this end. In addition, KHEOPS established a comprehensive knowledge mobilization activities program that will be set in motion in 2018–2019 (see page 24). KHEOPS also supported the dissemination and valorization of its work and activities, as well as those led by its members (see pages 26 and 27).

Research funding, direct access to practice settings, networking between sector stakeholders and members of academia to generate knowledge and the development, dissemination and transfer of knowledge constitute the backbone of the services KHEOPS currently provides. Their expansion went hand in hand with the development of administrative coordination and research project follow-up efforts. As the KHEOPS team grew and was restructured, project follow-up processes were progressively developed and implemented. The management procedures and required tools are now functional.



KHEOPS COMMUNITY

The KHEOPS community brings together **57 researchers and 11 students** in a range of fields from **10 universities across Quebec and Canada, and 12 abroad.**

These services provided by KHEOPS this year certainly had an impact on the development of the community, which grew from 17 to 57 researchers and 11 students in a range of fields from 10 universities across Quebec and Canada, and 12 abroad. KHEOPS gained worldwide recognition, leading to a number of international infrastructure researchers joining the KHEOPS community. Through this international network of academic experts, KHEOPS is now working to develop global joint projects and knowledge with a broader perspective to contribute to the reflection on the governance of large infrastructure projects. Several of KHEOPS's research project teams now include international experts (see *Current projects* appendix).

OBJECTIVE 3

SECURING FUNDING

Actions to be taken	Status
<ul style="list-style-type: none"> Confirm funding from 2 or 3 major partners 	<ul style="list-style-type: none"> In progress
<ul style="list-style-type: none"> Sign memoranda of understanding with universities 	<ul style="list-style-type: none"> In progress

ACHIEVEMENTS AND COMMENTS

The third objective of the strategic plan aims to consolidate the consortium's funding through its partnership policy (partner contributions). The KHEOPS team continues to work actively toward this objective. This year again, around 20 meetings took place to secure agreements with potential major partners, as well as with universities. In 2017–2018, Université de Sherbrooke joined KHEOPS as a scientific partner (agreement including financial contributions). In addition, scientific collaborations were set out with the CIRODD, CIRRELT, ITTECOP program (France) and RQM. KHEOPS also has two new collaborators: the Groupe de recherche

appliquée en macroécologie (GRAME, a non-profit that raises citizen awareness of environmental protection) and the Logistics and Transportation Metropolitan Cluster of Montreal (CargoM). And already other organizations have expressed their interest in working with KHEOPS and entering into collaboration and partnership agreements with the consortium.

KHEOPS WELCOMES ITS NEW PARTNERS!



STRATEGIC GOAL NO. 2

Support the development of leading-edge research on the governance of large infrastructure projects

OBJECTIVE 4

ADOPT A PROGRAM FOR RESEARCH THAT IS
INNOVATIVE & USEFUL FOR PARTNERS

Actions to be taken	Status
▪ Identify research needs	▪ In progress
▪ Propose and approve research programming	▪ In progress
▪ Have the programming adopted by the Board of Directors	▪ Pending
▪ Create research alliances/collaborations with industry experts and scientific partners	▪ In progress

ACHIEVEMENTS AND COMMENTS

There were a number of achievements accomplished under the fourth objective of the strategic plan. KHEOPS continues to focus its efforts on identifying research needs regarding governance of large infrastructure projects—an initiative that requires regular updating. In its first year, as well as in its second, KHEOPS worked to determine research needs through meetings and interviews with representatives of key organizations in the sector and discussions with members of the scientific community.

The knowledge mobilization program developed this year by the consortium team will be implemented in 2018–2019 (see p. 24). It calls for a number of actions to identify the research needs of researchers and stakeholders in the infrastructure ecosystem. This exercise will certainly support the development of the research program, which is already underway. Indeed, the consortium's executive team and a working group of the scientific committee have shared their thoughts and worked toward the definition of preliminary framework. It must now be further detailed before a final program is submitted to the board of directors.

For KHEOPS, 2017–2018 proved to be a successful year in terms of research alliances and collaboration.

First, City of Montreal, founding member of KHEOPS, actively contributed to a number of collaborative research projects (see Current Projects appendix). Notably, the city's Resilience Office mandated KHEOPS to present a proposal to develop a Montreal-based model for green and grey infrastructures (see Roundtables appendix).

In addition, as mentioned earlier, KHEOPS has five new scientific partners. With the CIRODD, the consortium worked to develop a new joint funding program that will be officially launched in spring 2018. An agreement was also reached between KHEOPS and the CIRRELT for producing a knowledge synthesis and a review of the scope of the work on mobility and security issues arising from the implementation of autonomous electric transportation. Led by Nathalie Drouin, the project will get underway soon.

Also, Professor Comtois, member of KHEOPS's scientific committee, was awarded \$200 000 in funding by the RQM's Odyssee Saint-Laurent program. The project, which is jointly led by Claude Comtois and Nathalie Drouin, will lead to a better understanding of the changes incurred through infrastructure development in terms of technological advancement, workforce productivity and environmental condition mitigation and adaptation measures in Quebec's

maritime and port industries. The scientific team includes S. Bleau (Ouranos), J. Carrière (Institut nordique de recherche en environnement et en santé au travail), F. Lassère (Université Laval) and B. Slack (Concordia University). The partners of the project are the Montreal Port Authority (Port de Montréal), Port de Trois-Rivières, Port de Sept-Îles, the Comité sectoriel de main-d'oeuvre de l'industrie maritime and CargoM.

At the international level, in June 2017, at the annual conference held by the European Academy of Management (EURAM 2017), Nathalie Drouin, KHEOPS's executive director, in collaboration with KHEOPS researchers and international collaborators (S. Clegg, University of Technology Sydney; S. Sankaran, University of Technology Sydney; M. Huemann, Vienna University of Economics and Business and A. Van Marrewijk, Vrije Universiteit, Amsterdam) organized a seminar titled Managing major and mega projects: Opening up for new research eras on new research approaches to develop knowledge regarding major and mega project management and governance. A special issue of the Journal of Managing Projects in Business was published (see Member publications appendix), and Emerald Publishing, which publishes the journal,

handed out an award to the best paper presented at the conference. Nathalie Drouin, in collaboration with KHEOPS researchers and international collaborators, submitted a new proposal to EURAM in July 2017. The proposal was accepted and the seminar to be held in June 2018 will focus on the importance of revisiting conventional project management approaches.



OBJECTIVE 5

FUND RESEARCH PROJECTS

Actions to be taken	Status
▪ Develop a research funding model	▪ Completed
▪ Launch calls for projects	▪ Completed
▪ Negotiate and draw up contractual agreements	▪ Completed
▪ Support researchers funded by KHEOPS	▪ Completed

ACHIEVEMENTS AND COMMENTS

The KHEOPS team reached the fifth objective of its strategic plan which aimed to fund research projects. Indeed, the fulfillment of the objective was among the consortium's key activities in 2017–2018 and remains at the core of KHEOPS's mission. The funding model and post-funding project administration terms are therefore operational. While KHEOPS has limited means to fund research, the consortium contributed to seven projects (see Current projects appendix for more details). It also assembled two roundtables: one on autonomous electric transportation and one on green and grey infrastructures (see Roundtables appendix). The research projects that will be carried out as part of the roundtable initiatives will be subject to research contracts. Note that the funds allocated to develop research projects are essentially used to recruit students as research assistants. This year, 11 students were hired and are actively working to develop knowledge under the supervision of KHEOPS project leaders.

KHEOPS PROJECTS :



7 RESEARCH PROJECTS



2 ROUNDTABLES



1 CALL FOR PROPOSALS

In November 2017, KHEOPS and the Fonds de recherche du Québec – Société et culture (FRQSC) launched a call for proposals in Quebec on the culture of ethics in the ecosystem of large infrastructure projects (Gouvernance, hauts dirigeants et prise de décision : La culture éthique dans l'écosystème des grands projets d'infrastructure – see Call for proposals appendix). At the time of writing, the applications were under review. The results of the process will be announced during the week of May 28th, 2018.

OBJECTIVE 6

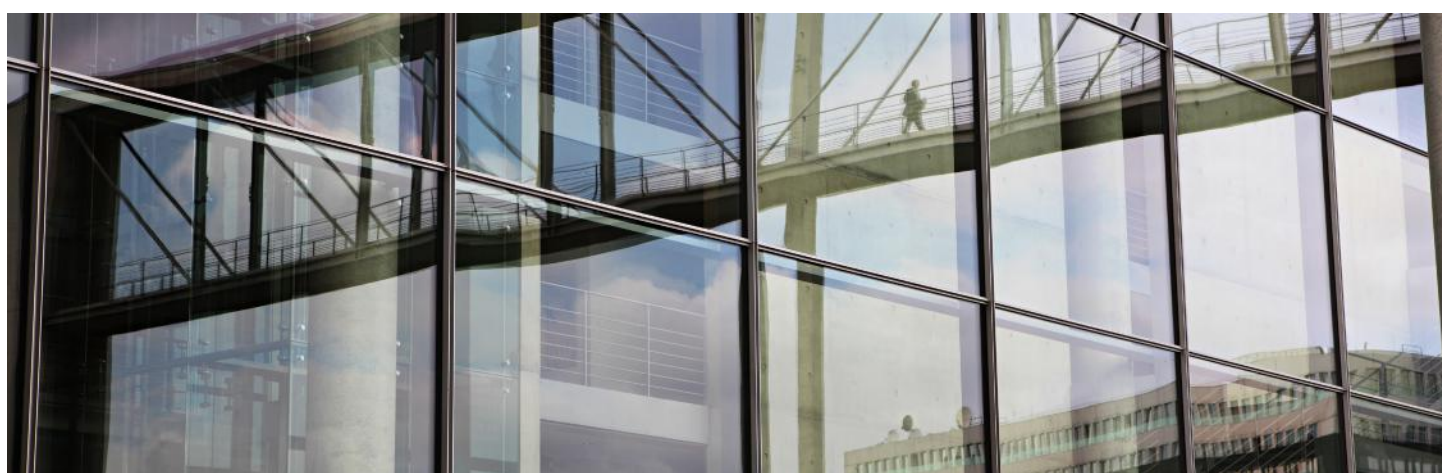
FACILITATE ACCESS TO EXISTING KNOWLEDGE

Actions to be taken	Status
<ul style="list-style-type: none">▪ Develop knowledge mobilization services and activities	<ul style="list-style-type: none">▪ In progress
<ul style="list-style-type: none">▪ Set up an information monitoring service	<ul style="list-style-type: none">▪ In progress
<ul style="list-style-type: none">▪ Consider the possibility of developing a database	<ul style="list-style-type: none">▪ Completed
<ul style="list-style-type: none">▪ Hire the necessary human resources (knowledge broker, monitoring officer)	<ul style="list-style-type: none">▪ Pending

ACHIEVEMENTS AND COMMENTS

In 2017–2018, the KHEOPS team worked to develop a knowledge mobilization program that will be gradually implemented in 2018–2019. The program consists of seven types of activities, including forums, lunch conferences, a public conference and a contemporary art exhibition. To ensure the funding and feasibility of this ambitious program, the KHEOPS team applied creativity to its funding strategy. Throughout the year, KHEOPS sought in-kind and financial contributions from its partners and other organizations that, once added to the consortium's budget, made it possible to apply for complementary funding under the Social Sciences and Humanities Research Council's Connection program. Doing so required the involvement of multiple partners (CIRAIG, CIRODD, CIRRELT, École des sciences de la gestion de l'UQAM, FRQ and Hexagram), further consolidating the consortium's collaborative ties.

KHEOPS will hire or be loaned human resources (professionals and students) to lead its knowledge mobilization activities. However, the consortium must suspend its information monitoring project until a dedicated resource is hired, which is not financially feasible at the moment. Similarly, after assessing the option to develop a digital infrastructure data platform—and despite the interest in the project—KHEOPS concluded that it cannot pursue the initiative in the short term.





STRATEGIC GOAL NO. 3

Provide visibility and outreach for KHEOPS and its scientific collaborators

OBJECTIVE 7 DEVELOP AND IMPLEMENT A COMMUNICATION PLAN

Actions to be taken	Status
<ul style="list-style-type: none">▪ Analyse the context and identify the target, objectives and key messages	<ul style="list-style-type: none">▪ Completed
<ul style="list-style-type: none">▪ Choose the communication methods	<ul style="list-style-type: none">▪ Completed
<ul style="list-style-type: none">▪ Define content, establish a time frame & monitor the results	<ul style="list-style-type: none">▪ Completed

ACHIEVEMENTS AND COMMENTS

The final objective of KHEOPS's strategic plan was attained in every aspect. In the previous report, it was announced that the consortium's second fiscal year would call for efforts to ensure the visibility of KHEOPS and its community. Indeed, doing so became the team's focus. An emblematic event in KHEOPS's short period of existence was held on September 18th, 2017, with the official launch of the consortium in the presence of Pierre Desrochers, then chair of the City of Montreal's executive committee, Rémi Quirion, Quebec's chief scientist and Robert Proulx, then rector of UQAM. Over 100 guests, including senior officials, stakeholders in the infrastructure ecosystem and members of the scientific community, attended the event at Maison du développement durable in Montreal. During the event, a three-minute English-language video message aimed at the public was presented for the very first time to describe the specific approach developed by KHEOPS. The video is now available on KHEOPS's social media pages, website and YouTube channel. Also, KHEOPS is on Twitter, LinkedIn and Facebook in recurrent and targeted posts according to a schedule designed to ensure the visibility of the consortium and its researchers.

KHEOPS's official launch set the tone for 2017–2018, which focused largely on communication. A communication plan drawn up in the previous fiscal year and was revised by the new communication officer, who reconsidered the objectives and actions. At the same time, the consortium's website was revamped this winter. It was optimized and simplified to provide an improved browsing experience and access to expanded content. In February 2018, KHEOPS launched its new bilingual (French-English) website to enable members of the international community to follow the activities of the consortium and those of its members. It is important to mention that the Fonds de recherche du Québec provided translation support in the transition to a bilingual website. At the same time, KHEOPS redesigned the WebK portal, a document management platform with exclusive access for members.



188 Twitter
followers

1 943 impressions
generated by the leading tweet

In addition, since October 2017, KHEOPS communicates with community members through a newsletter that details the consortium's high points and showcases its members' accomplishments. To date, six newsletters have been sent out. They are available online on KHEOPS's website. The team also created the Regard sur la recherche/Research glimpse video serie, which consists of short clips featuring KHEOPS researchers who present their work and the impacts of their findings on the infrastructure ecosystem. The first episode was released in November 2017. The second is expected in May 2018, and others are currently in production.



16 287 page views



148 newsletter subscribers



EVENTS AND ACTIVITIES

2017

April 5 PARTICIPATION	TIESS working seminar (invitation). <i>Le transfert et la transition écologique et sociale : comment travailler ensemble vers la transition ?</i> Montreal (Canada)
April 6 and 7 PARTICIPATION	5th edition of the CRISES international conference. <i>Des émergences à la reconnaissance. Trajectoires d'innovation</i> Montreal (Canada)
May 4 PARTICIPATION	2017 ADARUQ workshop. <i>L'administration de la recherche à l'heure de la transectorialité</i> Montreal (Canada)
May 12 PARTICIPATION	CIRODD meeting. <i>Innover pour une santé durable</i> Montreal (Canada)
May 12 PARTICIPATION	CCMM strategic forum on transportation. <i>Une métropole en mouvement</i> Montreal (Canada)
May 17 PARTICIPATION	Launch of the Chaire de recherche industrielle Pomerleau sur l'innovation et la gouvernance des projets de construction Montreal (Canada)
June 5 PARTICIPATION	Panel of the Canadian Club of Montreal. <i>Développement des infrastructures, financement et investissements au Canada</i> Montreal (Canada)
June 21-25 PRESENTATION	2017 EURAM Conference. <i>Making Knowledge Work</i> Glasgow (United Kingdom) Nathalie Drouin led a presentation entitled "Special Topic - Managing Major and Mega Projects: Opening up for New Research Eras."
September 18 KHEOPS EVENT	Official launch of KHEOPS Montreal (Canada) Cocktail reception in the presence of Mr. Pierre Desrochers, chair of the executive committee of the City of Montreal, Mr. Rémi Quirion, chief scientist of Quebec, Mr. Robert Proulx, rector of UQAM, Ms. Nathalie Drouin, executive director of KHEOPS, and members of the scientific and business communities.

September 21 PRESENTATION	AQTR Sommet de la rentrée. <i>Les grands projets en transport</i> Montreal (Canada) KHEOPS booth and presentation by Nathalie Drouin.
September 22 PARTICIPATION	Launch of the FRQ Audace Montreal (Canada)
October 2-4 PARTICIPATION	ENAP workshop (invitation). <i>Coconstructing Knowledge for urban resilience implementation</i> Montreal (Canada)
October 16-17 PARTICIPATION	Chaire In.Situ seminar (part of the 30th edition of the Entretiens Jacques-Cartier). <i>Mobilité et transports urbains face aux défis de la sobriété</i> Montreal (Canada)
October 17 PARTICIPATION	FRQS-CNRS seminar (part of the 30th edition of the Entretiens Jacques-Cartier). <i>L'usage de la diplomatie scientifique – Regards croisés France-Québec</i> Montreal (Canada)
October 25 PRESENTATION	Seminar of the Appalachian Corridor. <i>Colloque sur l'écologie routière et l'adaptation aux changements climatiques : de la recherche aux actions concrètes</i> Quebec (Canada) Nathalie Drouin presented the work led by KHEOPS at a plenary session.
October 21 and November 1st PRESENTATION	FRQSC-NSFC seminar. <i>Villes intelligentes 2017 : innovations québécoises et chinoises</i> Montreal (Canada) Nathalie Drouin presented KHEOPS and its approach on issues related to smart cities.
November 22-24 PARTICIPATION	ADARUQ 34th annual conference. <i>Recherche en partenariat. Divers acteurs, divers défis, vers une action concertée</i> Shawinigan (Canada)
November 29 PARTICIPATION	FRQ conference. <i>Communiquer la science en 2017 : Défis et perspectives</i> Montreal (Canada)

2018

January 12

KHEOPS
EVENT

4 @ 8 Networking. Networking event for members of the KHEOPS community to mark the new year | **Montreal (Canada)**

February 21

PRESENTATION

Lunch conference at École de gestion de l'Université Sherbrooke
Sherbrooke (Canada)

Nathalie Drouin and Alexandra Prohet presented KHEOPS.

March 15

PARTICIPATION

Co-cr ation day (part of the Smart Cities Challenge) organised by the Smart and Digital City Office of Montreal | **Montreal (Canada)**

March 23

PARTICIPATION

CCMM strategic forum on major projects. *Les grands projets qui red finissent l'image de la m tropole* | **Montreal (Canada)**



PARTNERS

As of March 31st, 2018, KHEOPS has 14 partners and collaborators. The consortium would like to sincerely thank each of them.

Founding members



Major partner



Scientific partners



Associate partner



Collaborators





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APPENDICES



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APPENDIX I RESEARCH PROJECTS



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LIST OF RESEARCH PROJECTS

PROJECT 1

Integration of **Non-financial Benefits** Throughout the Life Cycle of Large Infrastructure Projects.

Research team :

- **Marie-Andrée CARON** - Professor, ESG UQAM and Director, Centre OSE
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM
- **Harvey MAYLOR** - Professor, Oxford University
- **Christine LACASSE** - PhD student, UQAM

PROJECT 2

Development of Logistics Clusters from the Point of View of **Social Acceptability**.

Research team :

- **Florence PAULHIAC SCHERRER** - In.SITU Chairholder, UQAM
- **Teodor Gabriel CRAINIC** - Professor, ESG UQAM
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM
- **Sébastien LANGLOIS** - Assistant Professor, Université de Sherbrooke
- **Charlotte ALIX-SÉGUIN** - Master's student, UQAM
- **Andréanne DEMERS** - Master's student, UQAM
- **Vincent LANIEL** - Master's student, UQAM

PROJECT 3

Coordination, Cohabitation and Communication Issues in Municipal Construction Project Management.

Research team :

- **Walter REI** - Professor, UQAM
- **Sanjay Dominik JENA** - Professor, UQAM
- **Claudio CONTARDO** - Professor, UQAM
- **Benoît DUGUAY** - Professor, UQAM
- **Emmanuelle TOUSIGNANT-LARIVIÈRE** - Bachelor's student, UQAM

PROJECT 4

Assets Transfers and **Associated Risks** Following Project Completion.

Research team :

- **Robert PELLERIN** - Chairholder, Jarislowsky/SNC-LAVALIN Research Chair in International Project Management and Professor, Polytechnique Montreal
- **Marcelin JOANIS** - Professor, Polytechnique Montreal
- **Mario BOURGAULT** - Professor, Polytechnique Montreal
- **Nathalie DE MARCELLIS-WARIN** - President and Chief Executive Officer, CIRANO
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM

PROJECT 5

Success Stories of Megaproject Managers.

Research team :

- **Andy DAVIES** - Professor, University College London
- **Harvey MAYLOR** - Professor, Oxford University
- **Stewart CLEGG** - Professor, University of Technology Sydney
- **Daphne FREEDER**, Research Centre Manager, CMOS, University of Technology Sydney
- **Shankar SANKARAN** - Professor, University of Technology Sydney
- **John STEEN** - Professor, University of Queensland Business School
- **Martina HUEMANN** - Professor, WU Vienna University of Economics and Business
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM
- **Quian SHI** - Professor, Tongji SEM
- **Maude BRUNET** - Postdoctoral candidate, ÉTS
- **Ashwin MAHANLINGAM** - Dr., IIT Madras
- **Alfons VAN MARREWIJK** - Professor, VU University Amsterdam
- **Ralf MÜLLER** - Professor, BI Norwegian Business School

PROJECT 6

Accountability of Municipal Infrastructure Projects: Indicators, Targets and Means of Measurement.

Research team :

- **Alejandro ROMERO-TORRES** - Professor, UQAM
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM

PROJECT 7

Governance Effectiveness of Large Infrastructure Projects.

Research team :

- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM
- **Ralf MÜLLER** - Professor, BI Norwegian Business School
- **Shankar SANKARAN** - Professor, University of Technology Sydney

PROJECT 1 - INTEGRATION NON-FINANCIAL BENEFITS THROUGHOUT THE LIFE CYCLE OF LARGE INFRASTRUCTURE PROJECTS

SUMMARY

The research project looks at ways of incorporating non-financial benefits, for instance social benefits, throughout the life cycle of large infrastructure projects. It aims to identify the stakeholders that could intervene in the process to account for non-financial benefits, to document the specific content of these benefits based on experiments described in the literature and to target relevant theories and methodologies (positive and interpretive).

OBJECTIVE

To identify non-financial benefit models that may be integrated to the planning of major infrastructure projects and throughout their life cycles.

EXPECTED OUTCOMES

- To determine best practices to identify and assess non-financial benefits
- To develop an approach to co-build and implement tools to define, select and audit infrastructure projects based on their social, economic and environmental impacts

PARTNER



PROJECT 2

DEVELOPMENT OF LOGISTICS CLUSTERS FROM THE POINT OF VIEW OF SOCIAL ACCEPTABILITY

SUMMARY

The research project aims to gain in-depth understanding of social acceptability construction in the context of logistic cluster development in order to adapt and enhance the solutions that are considered.

OBJECTIVES

- To highlight the economic, socio-spatial and political dynamics on which community support or opposition for the implementation of a logistics hub on a particular territory is based.
- To identify conflictual dimensions and the factors that foster a better integration of infrastructure projects to their environment.
- To identify mechanisms that support conflict resolution and strengthen the capacity to reconcile divergent interests.

EXPECTED OUTCOMES

- To advance knowledge regarding processed to optimize social acceptance of infrastructure projects.
- To foster adequate consideration of a community's concerns and claims when implementing a logistics hub.
- To contribute to the development and appropriation of knowledge that is useful to stakeholders of *Quebec's Maritime Strategy*.
- To support the sustainable growth of Quebec's maritime economy.

PARTNER

PROJECT 3

COORDINATION, COHABITATION AND COMMUNICATION ISSUES IN MUNICIPAL CONSTRUCTION PROJECT MANAGEMENT

SUMMARY

The number of roadwork projects is increasing steadily and significantly in Montreal. From these projects arise financial and urban planning problems that city managers must address. The project aims to develop methodologies to support managers as they resolve roadwork planning issues.

OBJECTIVES

- To map the city of Montreal's current roadwork planning processes.
- To design predictive analytical methodologies to generate the information required to carry out the planning processes.
- To design prescriptive analytical methodologies to obtain quality solutions to address the planning issues under study.

EXPECTED OUTCOMES

- To reduce the negative impacts of roadwork for all city stakeholders.
- To gain a better understanding of the impacts of roadwork planning and execution for city managers.
- To develop innovative methodologies to support decision making when planning urban roadwork.
- To contribute to the development of efficient predictive and prescriptive analytical methodologies that are easily transferable to the municipal management context.

PARTNER

PROJECT 4

ASSETS TRANSFERS AND ASSOCIATED RISKS FOLLOWING PROJECT COMPLETION

SUMMARY

The research project focuses on the management of risks related to execution and assets transfer in the context of large infrastructure projects, such as those associated to land transport projects on the territory covered by the *Plan Nord*.

OBJECTIVES

- To develop a baseline for asset transfer activities of major infrastructure projects.
- To develop a risk management tool specific to assets transfer.
- To recommend a project governance framework for asset transfers.

EXPECTED OUTCOMES

- To identify and disseminate best practices in asset transfers.
- To identify and assess the inherent risks of asset transfers in major infrastructure projects.
- To develop a decision-making tool to identify, assess and monitor risks during asset transfers.

PROJECT 5

SUCCESS STORIES OF MEGAPROJECT MANAGERS

SUMMARY

Using a narrative approach, this project seeks to present the stories of top managers who have successfully overseen large infrastructure projects. Collected from individuals in nine countries, these stories will be collected in an edited book that highlights exemplary approaches regarding the governance of large infrastructure projects.

OBJECTIVES

- To study the governance and management models implemented to successfully lead major projects.
- To document the factors that influence the success of a large project.
- To identify the lessons learned from managing the studied projects.
- To formulate recommendations to enhance major project planning and management in different circumstances and conditions.

EXPECTED OUTCOMES

- To document the experiences of executives who successfully oversaw major projects.
- To expand governance and management models for major infrastructure projects.

PROJECT 6

ACCOUNTABILITY OF MUNICIPAL INFRASTRUCTURE PROJECTS: INDICATORS, TARGETS AND MEANS OF MEASUREMENT

SUMMARY

This two-stage research project focuses on project performance indicators that could be used by the City of Montreal to improve accountability and effectiveness of infrastructure projects.

In the first stage, a literature review will be conducted to identify best practices to support accountability of municipal infrastructure projects. The second stage involves action research targeting two infrastructure projects led by the City of Montreal.

OBJECTIVES

- To identify best practices for accountability of municipal infrastructure projects by determining, measuring and communicating infrastructure project performance indicators.
- To implement performance indicators for municipal infrastructure projects led by the City of Montreal.

EXPECTED OUTCOMES

- To gain access to recent and reliable data on performance indicators for municipal infrastructure projects.
- To compare accountability practices of the City of Montreal to the ones of other municipalities.
- To Support Montréal pour tous and the City of Montreal in improving control of public spending and the overall city's performance.

PARTNERS



PROJECT 7

GOVERNANCE EFFECTIVENESS OF LARGE INFRA-STRUCTURE PROJECTS

SUMMARY

The research project is focused on the effectiveness of governance mechanisms for large infrastructure projects. It involves two subprojects :

1.The first aims to develop an integrative model that links the different levels of governance that are part of the ecosystem of major projects, namely global, institutional, territorial, organizational and project governance.

2.The second seeks to undertake a diagnosis of the components of organizational project management by examining the relationships between these elements, their integration and their implementation in different organizations.

OBJECTIVES

- To explore the specificities of global, institutional, territorial, organizational and project governance.
- To develop a model that integrates the various forms of governance that interact during the realization of a large infrastructure project.
- To assess organizational project management performance using the Onion Model.

EXPECTED OUTCOMES

- To improve the understanding of decision makers regarding the different types of governance and their links within a major project.
- To optimize the governance practices of major infrastructure projects.



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APPENDIX II

ROUNDTABLES



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LIST OF ROUNDTABLES

ROUNDTABLE AET

Social Issues Related to the implementation of **Autonomous Electric Transportation** in Quebec.

Research team :

- **Soumaya CHERKAoui** - Professor, Université de Sherbrooke
- **Lynda BELLALITE** - Professor, Université de Sherbrooke
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM

ROUNDTABLE MGI

Development of a Montreal Model for **Green and Grey Infrastructures**.

Research team :

- **Marie-Amélie BOUCHER** - Professor, Université de Sherbrooke
- **Nathalie DROUIN** - Executive Director, KHEOPS, UQAM
- **Jie HE** - Professor, Université de Sherbrooke
- **Robert LECONTE** - Chairholder, NSERC Industrial Research Chair on the Application of Hydrometeorological Data from Satellite Images to Improve Hydrological Forecasting and Professor, Université de Sherbrooke



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Roundtable AET : SOCIAL ISSUES RELATED TO THE IMPLEMENTATION OF AUTONOMOUS ELECTRIC TRANSPORTATION IN QUEBEC

SUMMARY

A responsible implementation of autonomous electric transportation in Quebec requires the consideration of a range of social issues. A roundtable bringing together key stakeholders was created in December 2017 by KHEOPS to address the overarching social dimensions that need to be integrated to the reflection process and to define research needs to support decision makers.

Two research projects were defined following the first meeting :

Project 1: Social acceptability of autonomous electric transportation

Project 2: Implications of autonomous electric transportation for urban planning and infrastructure

PROJECT 1 SOCIAL ACCEPTABILITY OF AUTONOMOUS ELECTRIC TRANSPORTATION

Summary

The use of autonomous electric transportation by citizens is intrinsically linked to the technology's social acceptance. From this perspective, the research project aims to gain in-depth understanding of the perceptions, expectations and needs of social stakeholders regarding autonomous modes of transportation. The project is also focused on assessing the impacts of autonomous electric transportation on the quality of life of citizens based on different development models. The knowledge that will be generated will be mobilized to optimize the technology's social integration.

Objectives

- To understand the issues related to the social acceptability of autonomous electric vehicles.
- To study the impacts of autonomous electric transportation on the quality of life of citizens based on the development model that is advocated.
- To identify current initiatives and those to be developed to foster the acceptability of autonomous electric transport by different segments of the population.

Expected outcomes

- To improve the understanding of decision makers on the perceptions and needs of different groups with regard to autonomous electric transportation.
- To set out initiatives that foster social acceptability of the technology.
- To identify opportunities associated with implementation strategies for autonomous electric transportation in Montreal and across Quebec.

PROJECT 2 IMPLICATIONS OF AUTONOMOUS ELECTRIC TRANSPORTATION FOR URBAN PLANNING AND INFRASTRUCTURE

Summary

The eventual advent of autonomous electric vehicles in Quebec raises questions regarding the transformations to implement in order to optimize the integration of autonomous electric vehicles in an urban environment. This research project aims to understand the implications of autonomous electric transport for urban planning and infrastructure. The lessons learned through this project will be mobilized to capitalize on the opportunities created as the technology is introduced into the Quebecer road network and to responsibly manage the risks that arise.

Objectives

- To identify the opportunities and the risks associated to autonomous electric transport for infrastructures and sustainable urban development.
- To assess the impacts on urban planning and infrastructures from a spatial and temporal perspectives.
- To set out urban development scenarios that take into account autonomous electrical vehicles.

Expected outcomes

- To help decision makers understand the implications of the advent of autonomous electric transportation for urban planning and infrastructures.
- To set out solutions to optimize the integration of autonomous vehicles into Quebec's urban road network

Roundtable MIG : Development of a Montreal Model for Green and Grey Infrastructures

In collaboration with the Resilience Office of the City of Montreal

SUMMARY

The Resilience Office, within the City of Montreal administration, mandated KHEOPS to conduct a research project to develop a Montreal model for permanent mitigation measures aimed at preventing the impacts of flooding in vulnerable areas on the island. The study focuses on permanent preventive measures that may be implemented in complementarity to temporary reactive solutions. In addition to standard practices, the project will explore innovative solutions that can be adapted to the specificities of the local context.

PHASE 1 IDENTIFICATION OF PERMANENT FLOOD MITIGATION MEASURES

Summary

The first phase of the project aims to identify the structural and non-structural measures to mitigate flood threats and to provide an overview of the stakeholders that may be called upon in the implementation of these measures.

Objectives

- To Identify structural mitigation measures to protect people, buildings and infrastructure from flooding.
- To identify non-structural flood risk mitigation measures.
- To document the roles and responsibilities of key stakeholders and their interactions.

Expected outcomes

- To identify permanent measures implemented in Montreal, Quebec and around the world to prevent the impacts of flooding in vulnerable areas.
- To strengthen the collaboration between stakeholders that are involved in the implementation of structural and non-structural mitigation measures.
- To contribute to an assessment of permanent mitigation measures and a feasibility analysis for Montreal (phase 2).



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APPENDIX III CALL FOR PROPOSALS



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Call for proposals : GOVERNANCE, TOP MANAGERS AND DECISION-MAKING: BEST ETHICAL GOVERNANCE PRACTICES IN LARGE INFRASTRUCTURE PROJECTS

In collaboration with the *Fonds de recherche du Québec – Société et Culture*

[Accueil](#) / [Bourses et subventions](#) / [Consulter les programmes](#) - Remplir une demande

Gouvernance, hauts dirigeants et prise de décision : la culture éthique dans l'écosystème des grands projets d'infrastructure

[Retourner aux résultats](#)



Imprimer



Partager

En résumé

Année de concours :	2018-2019
Date limite (avis ou lettre d'intention) :	24 janvier 2018, 16h
Date limite (demande) :	4 avril 2018, 16h
Montant :	150 000\$
Durée du financement :	2 ans
Annonce des résultats :	Semaine du 28 mai 2018

Remplir une demande >

APPEL DE PROPOSITIONS

Proposé par :

KHEOPS - Consortium international de recherche sur la gouvernance des grands projets d'infrastructure

et le Fonds de recherche du Québec - Société et culture (FRQSC)

Taken from the website of the *Fonds de recherche du Québec – Société et Culture*



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APPENDIX IV PUBLICATIONS BY KHEOPS MEMBERS



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PEER-REVIEWED ARTICLES

Al Nahyan, M. T., Hawas, Y. E., **Raza, M.**, Aljassmi, H., Maraqa, M. A., Basheerudeen, B., Mohammad, M. (2018) **A fuzzy-based decision support system for ranking the delivery methods of mega projects.** *International Journal of Managing Projects in Business*, Vol. 11, Issue 1.

Brunet, M. Aubry, M. (2018) **The governance of major public infrastructure projects: the process of translation.** *International Journal of Managing Projects in Business*, Vol. 11, Issue 1.

Müller, R., Sankaran, S., Drouin, N., Vaagaasar, A. L., Bekker, M. C., & Jain, K. (2018). **A theory framework for balancing vertical and horizontal leadership in projects.** *International Journal of Project Management*, 36(1), 83-94.

Pitsis, A., Clegg, S., Freeder, D., **Sankaran, S.**, Brudon, S. (2018) **Megaprojects redefined – complexity vs cost and social imperatives.** *International Journal of Managing Projects in Business*, Vol. 11, Issue 1.

Sankaran, S. (2018) **Megaproject Management and leadership: a narrative analysis of life stories – past and present.** *International Journal of Managing Projects in Business*, Vol. 11, Issue 1.

Söderlund, J., **Sankaran, S.**, Biesenthal, C. (2017/2018). **The Past and Present of Megaprojects.** *Project Management Journal*, Vol. 48, No.6, 5-16.

Steen, J., Ford, J. A., Verreyne, M. (2017/2018). **Symbols, Sublimes, Solutions, and Problems : A Garbage Can Model of Megaprojects.** *Project Management Journal*, Vol. 48, No.6, 117-131.

PUBLICATIONS IN SYMPOSIUM PROCEEDINGS

Drouin, N., Müller, R., Sankaran, S., Vaagaasar, A.L., Nikolova, N., Jain, K. (2017). **Balanced Leadership in Projects: the concept of socio-cognitive-space to support the building of organizational capabilities.** The « Project Hat ». IRNOP Conference, Boston, MA 11-14 Juin 2017.

Müller, R., Sankaran, S., Drouin, N., Vaagaasar, A.L., Bekker, G., Jain, K. (2017). **A Theory Framework for Balancing Vertical and Horizontal Leadership in Projects.** IRNOP Conference, Boston, MA 11-14 Juin 2017.

OTHER PUBLICATIONS

Aubry, M., Klein, G., ed. (2017/2018) **Project Management Journal, Special Issue**, Vol. 48, No. 6.

Blogue de la *Chambre de Commerce du Montréal Métropolitain*. « **Quand la recherche outille les décideurs – Entrevue avec Nathalie Drouin** ». Consulté en ligne le 24 janvier 2018. http://www.cmm.ca/fr/nouvelles/blog_quand_la_recherche_outille_les_decideurs/

Drouin, N. **A New Approach: New perspectives for quantifying the benefits of infrastructure**. *ReNew Canada, The Infrastructure Magazine*. Septembre/Octobre 2017 p. 32-33.

Drouin, N., ed. (2018) **International Journal of Managing Projects in Business, Special Issue**, Vol. 11, Issue 1.

Drouin, N., Müller, R., Sankaran, S. (2017). **The Nature of Organizational Project management through the lens of Integration**. Chapter 1 in **Sankaran, S., Müller, R., Drouin, N.** (2017) *Cambridge Handbook of Organizational Project Management*, Cambridge University Press.

Drouin, N., Sankaran, S. (2017). **Project Teams and their Role in Organizational Project Management**. Chapter 14 in **Sankaran, S., Müller, R., Drouin, N.** (2017) *Cambridge Handbook of Organizational Project Management*, Cambridge University Press.

Killen, C.P., Drouin, N. (2017). **Project Portfolio Management. A Dynamic Capability and Strategic Asset for OPM**. Chapter 5 in **Sankaran, S., Müller, R., Drouin, N.** (2017) *Cambridge Handbook of Organizational Project Management*, Cambridge University Press.

Müller, R., Drouin, N., Sankaran, S. (2018). **Balancing person-centric leadership and team-centric leadership in projects**. *Project management Institute Sponsored Research Program*, 5 January.

Sankaran, S., Müller, R., & Drouin, N. (Eds.). (2017). **Cambridge Handbook of Organizational Project Management**. Cambridge University Press.





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