

PROJECT TITLE: SP0360 CREATING A CULTURE OF SUSTAINABILITY IN THE MCGILL FACULTY OF DENTAL MEDICINE

Please answer the following questions and return the completed form to the [SPF Staff](#) via e-mail.

Final Report prepared by Christophe Bedos

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Actual Project Start Date 2025-02-01

Actual Project End Date 2026-03-01

Questions

1. Please summarize the project and its key accomplishments to date. In your answer, consider the impact your project has had so far on McGill's campus(es).

Unlimited characters, suggested minimum ½ page or ~250 words.

Our project aims to create a culture of sustainability within the McGill Faculty of dental medicine, and to support McGill University's strategy and goals of zero-waste and carbon-neutrality. This issue is important in dentistry, as that dental care has a high environmental footprint, as demonstrated by studies conducted in the UK.

Our project was designed to include two phases: Phase I- Planning phase (2025); and Phase II- Implementation phase (2026-2027). The goal of the planning phase, which is now concluding, was to prepare for the implementation phase and, more specifically, to: 1) Calculate the environmental footprint of our faculty's dental clinics and develop the capacity to monitor progress over time; 2) Create a Faculty Sustainability Committee; 3) Develop a strategy aligned with McGill University's goals of zero-waste and carbon-neutrality.

At the end of this planning phase, we have achieved several key outcomes:

- a) We calculated the environmental footprint of our dental clinics (waste and GHG emissions) and developed the capacity to monitor this footprint over time.
- b) We established a Sustainability Committee composed of individuals with diverse roles in the Faculty (undergraduate and graduate students, professors, support staff, clinical instructors). The Committee is responsible for promoting a culture of sustainability within the Faculty and overseeing the development of our strategic planning, policies, programs, and activities.
- c) We developed a strategy to develop a culture of sustainability, as described in our detailed Report (see attached).
- d) We have been disseminating knowledge within our Faculty and beyond through multiple channels: Faculty newsletter; Faculty council; Executive committee; graduate seminars; graduate and undergraduate Courses; masterclass to alumni; professional journals; short video capsules; comic strips (6 pages).

We are now ready to launch Phase II of the project (Implementation phase), for which we will submit an application to the SPF.

2. Please describe the key successes and challenges of your project. Include a minimum of two examples for each.

Unlimited characters, suggested minimum ½ page or ~250 words.

Beyond the achievements presented in our response to Question 1, we would like to highlight some key successes:

1- Mobilization of key Faculty leaders and faculty members in support of sustainability, and the establishment of our Sustainability committee.

A first example is our Dean's willingness to promote sustainability and share our experience at the level of the ADEA (American Dental Education Association). This is important, as our Faculty is developing a unique expertise that deserves to be shared. A second example is the support provided by a key leader, the Associate Dean for the Faculty

dental clinics, Dr Nathalie Morin, who has been highly active and supportive throughout the process of assessing our ecological footprint.

Importantly, this project has enabled the emergence of new sustainability leaders within our Faculty. The best example is my PhD student, Newsha Toreihi, who has been highly involved in the project and whose contribution deserves recognition. During this year, Newsha has developed her knowledge and skills and demonstrated great leadership. Her experience in this project will support her PhD project, which aims to make dental clinics more sustainable. A final example is the strong interest expressed by other graduate students to be involved in the project, although it has not always been possible to accommodate all requests.

2- Development of an ambitious strategy.

It was made possible by the recruitment of sustainability experts and by our ability to build a highly intersectoral team (nota bene: Phase II of the project will be required to transform this strategy into concrete achievements). For example, we worked closely with sustainability experts, particularly Jérôme Ribesse, who visited our faculty regularly to support the development of the project.

3- Production of a detailed and credible report.

We produced a solid and credible report with the support of Synergie Santé Environnement (SSE), a group specialized in supporting health organizations in their transition toward sustainability. The credibility of this report lies in its rigorous methodology and the expertise brought by external specialists. It has received very positive comments from the members of the Sustainability Committee.

We would also like to highlight several key challenges:

1- Participation of faculty members in a context of overloaded agendas.

Engaging Faculty members has been challenging due to competing priorities and limited availability. For example:

- a. Undergraduate students with a background in sustainability expressed enthusiasm to participate but lacked sufficient time to be effectively involved.
- b. Many instructors are present in the Faculty for only short periods, making them difficult to mobilize. For instance, clinical instructors are only present parttime, often for half a day per week, and therefore have limited availability.
- c. Understaffing and burnout among personnel have affected our capacity to carry out certain tasks. For instance, measuring the volume and cost of procurement has been very difficult due to missing staff for long periods of time.

2- Challenges related to measurement.

Accurately measuring environmental impacts remains complex because:

- a. Some sources of carbon emissions are difficult to capture, particularly those related to transportation and travel.
- b. Measuring water consumption is difficult because there is not water-meter in the faculty, but only for the whole building (which is own by a private company).

3- Changing mentalities and practices.

Transforming attitudes and practice is a long and demanding process, especially considering that:

- a. Many people view sustainability as something to be achieved solely through technical solutions, and tend to focus on waste management (to read concrete examples, please see attached our scientific article based on qualitative research conducted at McGill by my research team).
- b. A lack of systemic vision persists; addressing sustainability effectively requires engagement with more fundamental issues, such as extractivism, social and economic policies, or colonialism, which are rarely reflected upon in health care.

3. What key points of advice or lessons learned would you give to other SPF teams either regarding your experience managing your project or the project itself?

Unlimited characters, suggested minimum ½ page or ~250 words.

Here is some advice for colleagues interested in developing a major SPF project:

Be prepared to commit significant time to developing the project, and be aware that your work may not be appropriately rewarded.

It is important to note that researchers, including myself, are primarily expected to conduct research and are evaluated mainly on their research performance rather than on their contributions to the community. Consequently, projects such as this one may not be professionally rewarding and may even be perceived as a risk for early-career, tenure-track researchers. In my own case, my level of involvement and time commitment was substantial and has affected my research productivity. For example, although I am currently on sabbatical (time that is normally devoted to research), I have spent a substantial amount of time on this project and writing this report.

Get the support of key leaders.

Considering the previous point, it is essential to secure the support of key leaders who will not only support you career-wise but also facilitate the development of the project. In this process, it can be useful to demonstrate that the project is essential for the Faculty and the broader community. It is also pertinent to highlight to leaders that a successful sustainability project can reflect positively on their own actions and leadership.

Build a team of motivated and competent persons and encourage the emergence of leadership.

Creating a culture of sustainability is a long-term endeavor that requires a multidisciplinary team of individuals with complementary competencies. This team can also consult, and even include, when possible, members of the SPF, as they can provide helpful guidance throughout the project. In this team building process, it is important to emphasize capacity development and to support the emergence of future leaders, so that the project can continue and remain successful after you leave it.

4. How has your project helped to grow a culture of sustainability at McGill? You may consider social, economic, and/or environmental sustainability in your answer.

Unlimited characters, suggested minimum ½ page or ~250 words.

We must keep in mind that we have so far completed only the planning phase of the project (Phase I), which must be followed by an implementation phase (Phase II), for which I will soon submit an application to the SPF office. In brief, we are still at an initial stage of an implementation process that will progressively lead to a culture of sustainability within our Faculty. I would like to emphasize that creating a culture of sustainability is a long-term and ambitious process. Initially, it will require most people in the faculty to acquire new knowledge and to reflect on their perspectives regarding many aspects of our society, our civilization, and the planet. It will also require substantial change in practices that are deeply embedded through years of practice and routines.

Nevertheless, I believe that the conditions for change are favorable, as highlighted by research conducted by my team and me here at McGill. As illustrated in the attached article (with my PhD student, Newsha Toreihi, as first author), dental professionals currently lack knowledge about sustainability but are willing to learn. Another study (manuscript in preparation), based on a survey among Quebec dentists and dental hygienists, shows that the vast majority of surveyed professionals are highly concerned by the state of the planet but have little knowledge of how to implement sustainable practices. Most of them consider sustainability to be a priority in dentistry and believe that training in this area should be provided.

To conclude, despite being in its initial phase, our project has already promoted environmental sustainability through the introduction of new measures and practices aimed at reducing waste and energy consumption, as well as fostering more sustainable procurement. It has also promoted economic sustainability by encouraging reflection on purchasing policies, and on the need to reduce the consumption of products and equipment. The impact of our

project on social sustainability remains moderate, even though we will implement social prescribing in our faculty starting in 2026, an approach that aims at addressing the root causes of patients' health and illness by connecting them with local non-medical resources (in partnership with the Table de quartier Peter McGill). Social prescribing has the potential to reduce health care needs and promote equity.

5. What recommendations do you have for the future of this project and are there any opportunities for complementary projects? Who will take responsibility for the project's future and how can interested persons be in touch? The SPF team may be in touch for updates on the project's progress in coming years, if ongoing. *Unlimited characters, suggested minimum 1 paragraph.*

Our recommendations primarily apply to Phase II (Implementation) of the project, which is a necessary phase for implementing change and fostering a culture of sustainability within our Faculty. These recommendations are aligned with the report appended to this document.

Under the guidance of the Sustainability Committee, Phase II will aim to: 1) implement a regular sustainability training program for all Faculty professors, staff, and students (undergraduate and graduate); 2) implement and monitor new policies and practices aligned with McGill University's goals of waste reduction and carbon neutrality.

The domains addressed under these two objectives will include: sustainable transportation for Faculty members, staff, students, and patients; responsible procurement of equipment and materials; waste reduction, particularly of plastics, chemicals, and hazardous products; improved control of water and electricity consumption; the development of preventive approaches in our clinics; and the introduction of social prescribing as a means to address the root causes of ill health.

At the end of Phase II, we expect that the project will have contributed to the creation of a culture of sustainability and will have supported the emergence of sustainability leaders both within and beyond the Sustainability Committee. I consider that the implementation of sustainability to be an ongoing process that will require continuous learning and adaptation from all members of the Faculty, as well as sustained efforts to protect the planet and life on it. Consequently, I also expect that close links and alliances and partnerships with the SPF office and other SPF projects will continue over the years.

I would also like to mention that complementary projects are currently being undertaken under my guidance: a) a project financially supported by the Institut national de santé publique (INSPQ) aimed at developing and delivering a free, 3–4-hour asynchronous online training program on sustainable dentistry for Québec dental practitioners. This training will also be used within our Faculty to provide professors and clinical instructors with foundational knowledge on the topic; b) an implementation research project on sustainable dentistry in private practice in the Province of Quebec.

6. Would you or your project team member(s) be willing to serve as a mentor to SPF project teams? Please choose one. If yes, SPF Staff will contact you with more information. Yes No
7. In your application, you listed the following additional sources of funding:

McGill Faculty of Dental Medicine: \$1,000

Please confirm if you received this funding in the space below and list the actual amount (in dollars) that you received.

Funding from the faculty has been provided in kind through help from support staff.

8. How did you document your project, and did you include the SPF logo on any project materials (e.g. posters, promotional materials, social media posts, webpages, decals, etc.)? Please briefly describe in the field below.

We included the SPF logo and acknowledged the support of SPF in our presentations, seminars, courses, and other publications. We are grateful to the SPF for its support...

9. Did you purchase equipment or make an installation on campus? Yes No
If yes, please briefly describe how these items will be maintained and used in the future.

10. The following Key Success Indicators were indicated in your project application and selected for tracking. Please indicate the actual results that you have achieved in the “Actual” column.

Selected Key Success Indicators	Target	Actual
Number of environmental footprints calculated for the Faculty of Dental Medicine and Oral Health Sciences’ clinics	1	1
Number of Sustainability Committee’s within the Faculty of Dental Medicine and Oral Health Sciences	1	1
Number of strategic plans to reduce carbon emissions and waste for the Faculty of Dental	1	1

If there is a significant difference in the target numbers and the actual numbers achieved, please explain. If you have any additional information to share about these success indicators, please also include it below.

11. Please report on your progress with the Standard SPF Key Success Indicators in the “Actual” column.

Standard SPF Key Success Indicators	Actual
# of people hired using SPF funding for the project	2
# of volunteers directly or indirectly engaged in the project	2
# of people (student, staff, or other) trained in the context of the project	2
\$ raised for project activities subsequent to SPF funding	20,000\$
# of tons of GHG emissions reduced by your project	N/A yet
# of partnerships or collaborations developed between the project team and other McGill administrative units, student groups, community groups, other universities, and/or other groups/organizations	6

Please list the groups and/or organizations that you counted in the last Key Success Indicator. *Point form acceptable.*

Synergie Santé Environnement (Montreal, Quebec)
 Association of McGill dentistry students (graduate and undergraduate associations)
 Université Toulouse III (Toulouse, France)
 Table de quartier Peter McGill (for the implementation of social prescribing)
 Ecops-Conseil (Lille, France)

If you have any additional information to share about the Standard SPF Key Success Indicators, please include it below.

12. Please indicate the McGill stakeholder groups that were involved with your project as a team member or collaborator/partner. Select all that apply.

Undergraduate Postgraduate Administrative Staff Academic Staff Alumni

13. Please rate your project team's overall satisfaction with the support provided by the **SPF Staff**.

Very Dissatisfied Dissatisfied Neither Satisfied Nor Dissatisfied Satisfied Very Satisfied

Please provide any feedback or recommendations regarding your team's experience with the SPF Staff.

I would like to sincerely thank the SPF staff members, who have been incredibly helpful before and throughout the project. They have consistently been very supportive, doing all they could to help, guide, and accommodate me. It has been a real pleasure to collaborate with them.

14. Please rate your project team's overall satisfaction of your experience with the **SPF**.

Very Dissatisfied Dissatisfied Neither Satisfied Nor Dissatisfied Satisfied Very Satisfied

Please provide any feedback or recommendations regarding your team's experience with the SPF.

Please see previous question.

15. If there is additional information you would like to share about your project, please use the field below.

Unlimited characters.

We are currently producing materials to better inform members of the Faculty (students, staff, educators), external people or organizations connected to the Faculty (patients, suppliers, building owners), the broader McGill community (SPF; other faculties), and other institutions (dental faculties in Canada and abroad; dental professional organizations in Quebec and other provinces) about our project.

1. In collaboration with two Quebec-based artists (Martin PM and Audrey Robert), we are producing six pages of comics that present our project and describe its next phases. Each page focuses on a specific topic, such as governance, waste, transportation, and electricity consumption.

2. Under the leadership of Newsha Toreihi, we are also producing a series of short video capsules describing the main components of our project and summarizing our 1-year report.

These materials will be finalized shortly and will be widely shared in electronic format. We will use various dissemination approaches, including our newsletter, our website, McGill Media, and targeted emails to individuals and institutions.

16. Has your involvement in this SPF project positively impacted your team in the area of **professional growth**?

Yes No Prefer Not to Share

If you would like to elaborate, please use the field below.

We have not formally assessed professional growth among team members; however, I have observed that individuals, including myself, have evolved and developed new skills and competencies during Phase I of the project. I would be interested in exploring this aspect further in Phase II.

17. Has your involvement in this SPF project positively impacted your team in the area of **personal growth**?

Yes No Prefer Not to Share

If you would like to elaborate, please use the field below.

As mentioned in the previous question, we have not assessed this. In my view, reflecting on and acting on sustainability should strongly influence one's values, vision, and relationship with the world. This has been my personal experience over the past 5 years... My goal, as mentioned earlier in this document, is to go beyond the implementation of technical solutions, and engage people in a deeper process that supports personal growth and vision.

18. Which of the following skills or attributes has your team improved through involvement in your SPF project?
Select all that apply.

- | | | |
|---|--|---|
| <input type="checkbox"/> Budgeting | <input type="checkbox"/> Networking | <input checked="" type="checkbox"/> Systems Thinking |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Teamwork |
| <input type="checkbox"/> Conflict Resolution | <input checked="" type="checkbox"/> Problem Solving | <input checked="" type="checkbox"/> Technology |
| <input checked="" type="checkbox"/> Leadership | <input checked="" type="checkbox"/> Project Management | <input type="checkbox"/> Time Management |
| <input type="checkbox"/> Listening | <input type="checkbox"/> Public Speaking | <input type="checkbox"/> Writing |
| <input type="checkbox"/> Mentoring | <input checked="" type="checkbox"/> Stakeholder Engagement | <input type="checkbox"/> Other (<i>Please specify in the field below</i>) |
| <input checked="" type="checkbox"/> Negotiating | <input type="checkbox"/> Stakeholder Identification | |

Other:

19. Since starting your SPF project, has your team improved its **knowledge of sustainability**?

Yes No Prefer Not to Share

If you would like to elaborate, please use the field below.

We are learning day after day... (and we still have so much to learn...)

20. (Optional) If applicable, please list the total number of team members voluntarily self-identifying as members of marginalized communities. Total number: _____

(Optional) Please identify the represented communities below.

THANK YOU FOR COMPLETING YOUR FINAL REPORT!

Please e-mail your report to the [SPF Staff](#) attaching any additional information that you would like to share (e.g. other reports, research, documents, photos, etc.). Please note that this Final Report will be shared publicly on your SPF Project Webpage.