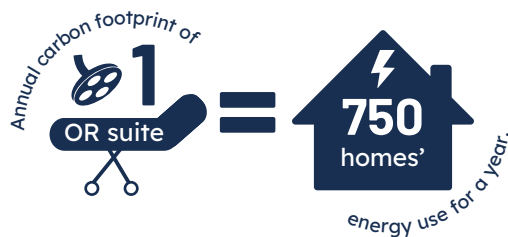


RESIDENT QUALITY IMPROVEMENT (QI)

Perioperative Opportunities for Healthcare Residents Primer

Climate change and environmental degradation pose accelerating and complex threats for 21st-century health systems. No other sector in Canada faces **as great a risk**—and no other sector has **as much to benefit** from climate action as does the **healthcare system**.

Even while our healthcare system responds to the effects of climate change, we are contributing to it: in Canada, our healthcare system accounts for an estimated 4.6% of national greenhouse gas emissions ([Eckelman, 2018](#)). Between 1/3 and 1/5 of these emissions result from operating room (OR) activity: a single OR suite in Canada has an estimated annual climate impact of 3,200,000 kg CO₂e, which is the equivalent of approximately 750 Canadian homes' energy use for a year ([MacNeill, 2017](#)). You can learn more about the environmental costs of operating rooms, and the many opportunities to decrease these, in [CASCADeS' Sustainable Perioperative Care Playbook](#).



Residents have the unique combination of clinical knowledge and leadership ability, as well as exposure to a variety of practice settings during their training, to bring about positive change in the perioperative space. For inspiration, you can visit [TRASH-CAN](#) to see how Canadian trainees are improving the sustainability of healthcare. If you want to make a change in your center, or are curious about what opportunities exist, check out these **five simple steps** to significantly reduce your professional carbon footprint:

1

Consider connecting with a mentor for free through the [TRASH-CAN platform](#) through this link. You will be connected with a mentor that can provide expert assistance in your campaign towards greener ORs.

2

Complete the [CASCADeS Perioperative Scorecard](#). You can download a fillable version to quickly evaluate your current hospital site, and identify areas for improvement.

- The Scorecard will highlight areas for potential improvement, as well as "Potential Quick Wins" where especially easy actions can reduce your OR emissions.
- CASCADeS is working towards a national dashboard to measure and monitor perioperative sustainability. If you have permission to share the information you used to complete your Scorecard, please consider sharing it with us [here](#) (and giving us feedback for the tool [here](#)).

What's next? You may feel ready to start another project, or to sign up to be a mentor for others navigating similar processes in their hospital sites. Or, you may want to continue your own educational journey with [foundational or specialized healthcare sustainability courses offered through CASCADeS](#).

Please share your feedback on this primer with us through a [brief survey](#). If you had a good experience, consider sharing it with your colleagues to spread perioperative sustainability!

3

Choose a project that you are passionate about.

- Maybe you have noticed a practice pattern at your site that could use improvement. If not, use the links embedded in the [CASCADeS Perioperative Scorecard](#) beside elements where your site is underperforming to see [customizable project charters](#) and [other resources](#) detailing a stepwise approach to turning your "Not Working On" and "Partially Achieved" scores into "Achieved" ratings.
- [Create your own charter summary](#) by outlining your goals, a root cause analysis, and how you will measure and test the positive changes you will make.
- Register your project with [TRASH-CAN](#). We will help promote it and scale it either at your institution or across other institutions.

4

Implement your QI project and set a timeline for it.

- Your project charter can tell you what metrics you want to measure, how you want to measure them, where to begin with implementation, and how to know when you have succeeded.
- If you get stuck, lean on your mentor(s).

5

Celebrate your achievement! Share your success with your mentor, your hospital, and your peers.

- Return to the [CASCADeS Perioperative Scorecard](#) to see how you have improved sustainability in your ORs. Consider [sharing the updated version with CASCADeS](#)!