

PHOTO: IAN PATTERSON



## The Mathematics of Green

SOMETIMES, THINGS THAT DON'T SEEM RELATED ARE ACTUALLY HIGHLY CONNECTED. SUCH IS THE CASE WITH AN NSERC DISCOVERY GRANT PROPOSAL SUBMITTED IN 2018 BY DR. ALEXEY RUBTSOV TITLED "A FINANCIAL MATHEMATICS APPROACH TO CLIMATE CHANGE RISK."

Not only did the proposal successfully secure funding for five years, it represents a growing field of research that uses financial mathematics to address pressing environmental concerns.

An expert in asset allocation, Rubtsov wants to make climate change risks an essential consideration in decision-making by companies and the investors who purchase their stocks. "We are working to develop financial models that incentivize companies to implement green policies and reduce their carbon footprint," he says. For example, he points out that if demand for a company's stock was tied to how green it was, that would influence its decisions.

Aside from his research, Rubtsov actively promotes student growth. He is a member of the department's undergraduate curriculum advisory committee, has developed a robust series of speakers and networking events that expose students to industry leaders, and regularly encourages students to publish their research in leading journals.

