Photonics: A strategic opportunity for Canada

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CMC Microsystems is pleased to support the recommendations of the Canadian Photonics Industry Consortium’s new report, *Light Technologies: A Strategic Economic Asset*.

The report highlights Canada’s past leadership in the field and calls for a national strategy to seize the economic opportunities offered by the rapidly expanding field of light-based technologies. The report reflects the input of stakeholders from industry, academia, government and R&D centres.

Photonics is a $650 B global industry with a significant economic impact in Canada, where approximately 400 photonics companies employ more than 25,000 people and generate $4.6 B annually. Average growth of the industry is 10%, and 65% of the goods it develops are exported to global markets. Currently Canada invests about $150M annually in supporting the work of photonics researchers at universities and R&D centres.

Now Canada must take a more focused approach, the report’s authors state, matching Canadian strengths in photonics with key industry sectors worldwide.

“As both a contributor to the CPIC report, and as an organization that has worked with Canadian photonics researchers, their students, and industry for nearly 20 years, we have seen first-hand the profound outcomes enabled by putting light to work,” says Dan Gale, Vice-President and Chief Technology Officer of CMC Microsystems.

“Today’s technologies -- from digital cameras and flat-screen TVs to telecommunications and medical devices -- are lighter, faster, less expensive, more energy-efficient and more powerful because of photonics R&D. And in many cases, these innovations were made possible by made-in-Canada photonics companies, and because of photonics education and training provided by Canadian universities. Now there is an opportunity to build on this foundation, and make photonics a significant driver of our economy.”

The Canadian photonics consortium provides a starting point for Canada to develop its own photonics strategy, enabling it to keep pace with similar initiatives in the U.S. and Europe, Mr. Gale says.

The full report can be viewed on the [CPIC website](http://photonscanada.ca/en/).

**About the Canadian Photonics Industry Consortium:**

The Canadian Photonic Industry Consortium (CPIC) is a business-led photonics exchange organization embracing the whole value chain from researchers to photonic companies and end users. Its mandate is to network end users, photonic industries, universities and institutions with the objective of accelerating the growth of the Canadian industry through photonics.

About CMC Microsystems:

CMC Microsystems, a not-for-profit corporation, operates, maintains and manages the facilities of Canada’s National Design Network. Through these facilities, researchers have access to the world’s best design tools, manufacturing technologies, nanofabrication laboratory equipment, measurement instruments, and engineering support. CMC works with partners to assist with advancing promising prototypes to larger scale developments.

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