



INNOVATION SUPERCLUSTERS

PROGRAM GUIDE

INNOVATION
FOR A **Better** CANADA

OUR INDUSTRY IS PARTICIPATING,
STRONGER THAN EVER !!

Photons and electrons are the fundamental building blocks interacting with the physical world to create the data on which our society is so deeply relying.

Unknown, but wise person !

What are the Innovation SuperClusters?



- New financing initiative
 - Designed to strengthen the most promising clusters
 - Accelerating the growth of innovative industries
 - Transforming Canadian corporations into global leaders
- A SuperCluster is :
 - A centre of innovation
 - Strong and numerous links between innovation actors
 - Organizations, public sector, university/academic research
 - A sector that provides exceptional returns and a significant impact on job creation and GDP

What are the Innovation SuperClusters?

- Recognition of the economic impact of a sector
 - A substantial financial support
 - Demand must be bold and ambitious
 - It must improve the regional ecosystem
 - The SuperCluster must be managed by industrial members
 - Financial commitments are important



Innovation SuperClusters' Normative framework



- Federal investment
 - \$950M over 5 years
 - SuperClusters will receive between \$125 and \$250M during the period
 - Only a few applications will be accepted (5 or 6)
 - Industrial commitment of equivalent value is required
 - Contributions in cash (75%) et in kind (25%) will be accepted

Innovation SuperClusters' Normative framework

- The eligible applicant
 - NFPO representing an industry-led consortium
 - Organization
 - Start-up
 - Small and medium enterprises (SMEs)
 - Large enterprises (more than 500 employees)
 - Actor of the innovation ecosystem
 - Academic and post-secondary institutions
 - Research Centres

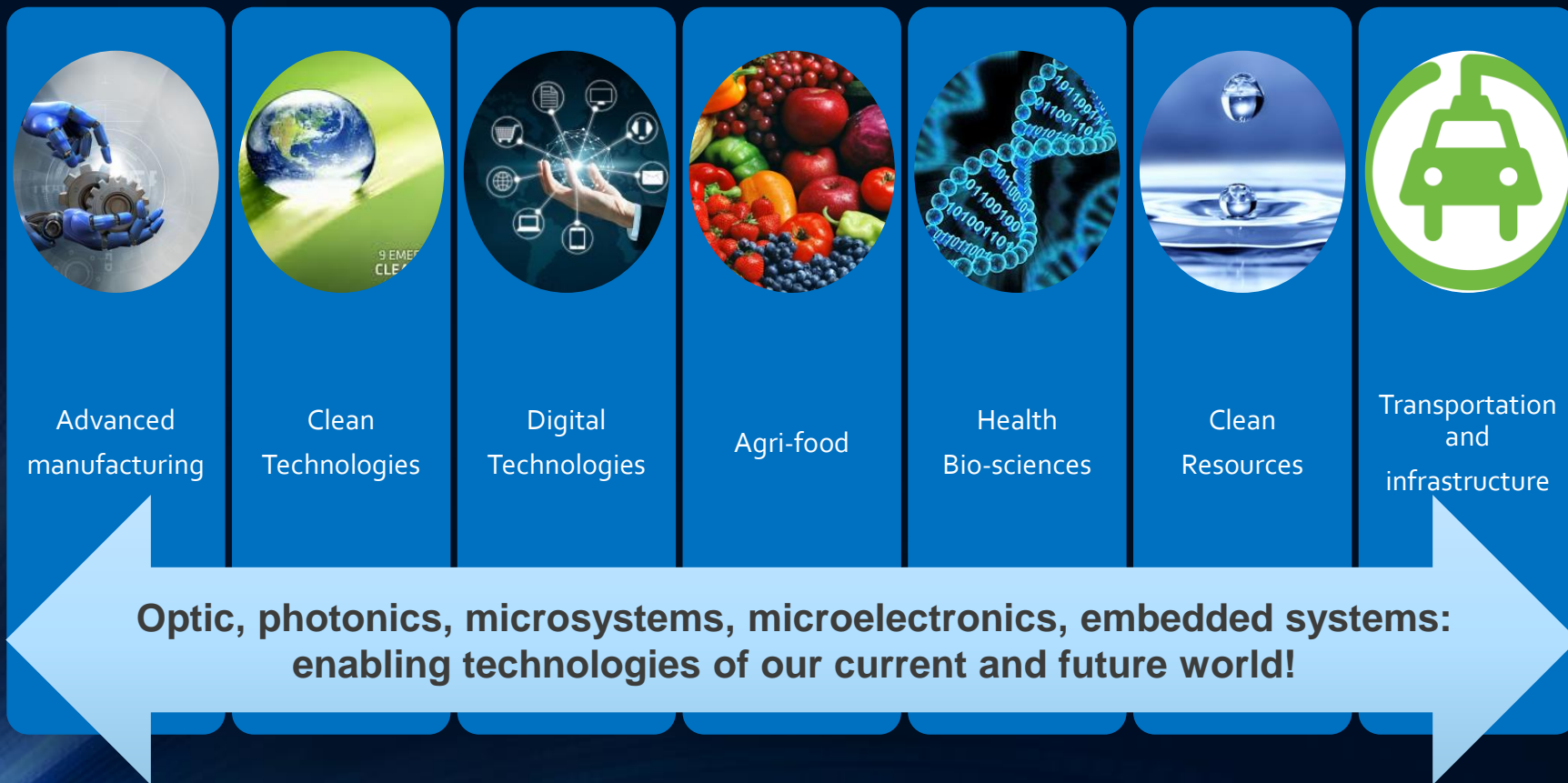


Innovation SuperClusters' Areas of Activity



- Technology Leadership (Mandatory)
 - Improved productivity, performance and competitiveness of member companies
- Partnerships for scale
 - Increased domestic or international demand
- Diversified and skilled talent pools
 - Activities that meet the needs of the workforce
- Access to innovation
 - Investment in assets, services or resources benefiting a wide range of businesses over a given period of time
- Global advantage
 - Positioning the cluster as a global leader

Innovation SuperClusters: Priority Areas Identified by the Government





Sensing 4.0

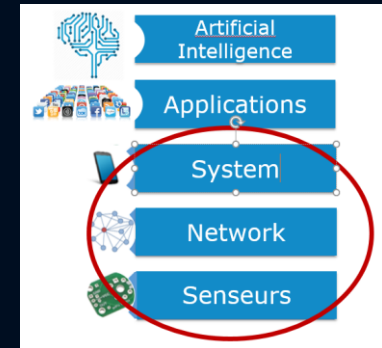
PHOTONS AND ELECTRONS: HARNESSING DATA FOR PROSPERITY

Sensing 4.0 : Photons and electrons: Harnessing data for prosperity

- **Why apply for an Innovation SuperCluster ?**

- **Economic growth opportunities are substantial**

- Opportunities for huge growth, thanks to Internet of Things (IoT)
- Our technologies are at the heart of the digital revolution
 - They are at the basis of several boiling sectors such as artificial intelligence, big data
 - They convert environmental world into digital data
- Economic impacts are significant for market segment identified by the Gouvernement of Canada
- Training of Highly Qualified Personnel (HQP)

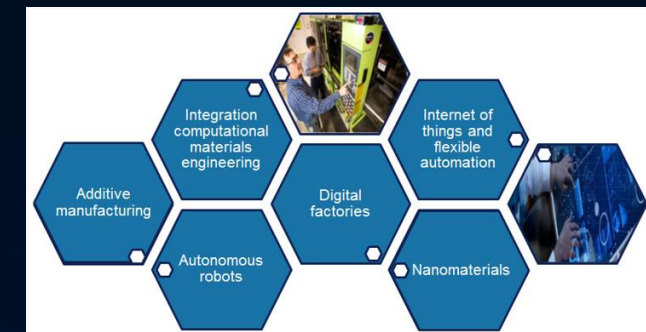
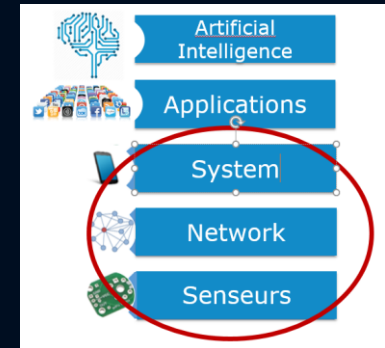


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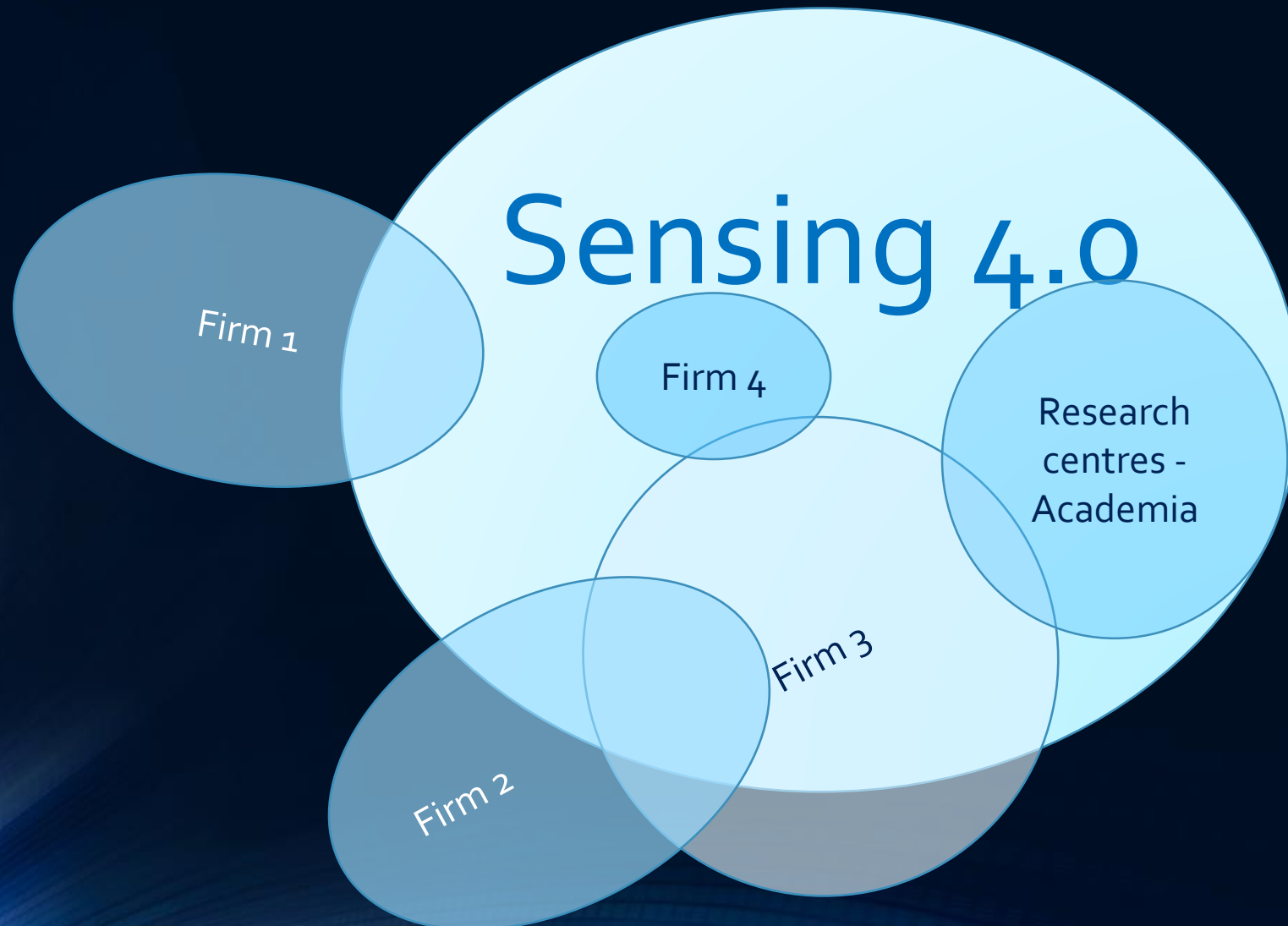
Photons and electrons: Harnessing data for prosperity

- **Innovation SuperClusters**

- **The Government recognizes the quality of the sector represented by photonics, optics and electronics**
 - Two private world-class research centres are present in the Québec – Ottawa – Toronto regional axis
 - INO (Photonics, optics)
 - C2MI (Electronic systems, MEMS sensors)
 - NRC, investing significant R&D efforts
 - Two poles of excellence representing the innovative industrial of the electronic and photonics/optics
 - A great deal of activity exists in our sectors of activity
 - We support the vast majority of high-growth sectors



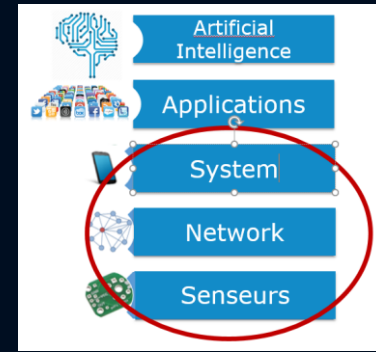
Consortium Supercluster development model



Ecosystem Benefits for the Investment



- **Substantial financial gains for industry**
 - A financial support ranging from 50 to 88% of the project value (depending on the size of the organization)
 - Private research still allowed
 - These additional amounts allow the industry to:
 - Accelerate its development
 - Explore alternatives to minimize risks
 - Develop a highly skilled workforce by working with research centres and post-secondary institutions
- **Substantial research support for academia**
 - Funds will be spent in a collaborative environment
 - Academia research is an obligation within the rules of engagement
 - Maximizes financial leverage with existing programs
 - Trains the labor force required by industry
- **Research centres**
 - Open innovation and research program (consortium)
 - Works on technologies required in collaborative mode for industrial members
 - Promotes technology transfers
 - Accelerates product commercialization



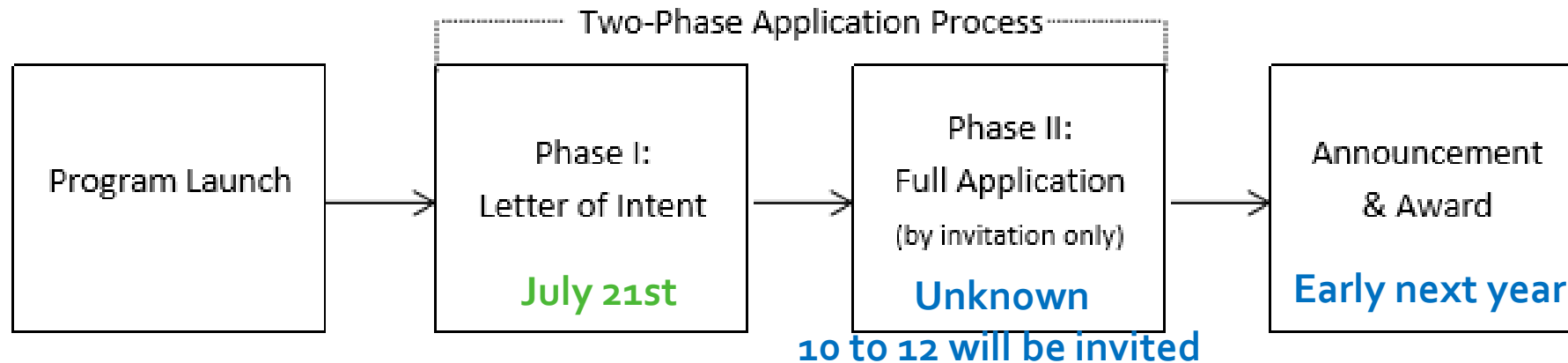
Proposed financial model



Industrial partners	QTY requis	Objective	Matching	SuperCluster Development consortium	NFPO (*)	Post-secondary Institution
Large enterprises	2		50%	40%	5%	Minimum 5% + NSERC leverage
SME (250-500)	1		60%	30%	5%	Minimum 5% + NSERC leverage
SME (100-250)			68%	23%	4%	Minimum 5% + NSERC leverage
Small business (5-100)	1		73%	18%	4%	Minimum 5% + NSERC leverage
Start-up			88%	3%	4%	Minimum 5% + NSERC leverage

(*) Funds used to manage the program, development support of the workforce (i.e. MITACS), etc.

Applying to the Innovation Supercluster Initiative (ISI) : The process...



Step 1: Program launch and call for Letters of Intent

Step 2: Review of Letters of Intent

Step 3: Announcement of Applicants invited to submit Full Applications and opening of this intake process

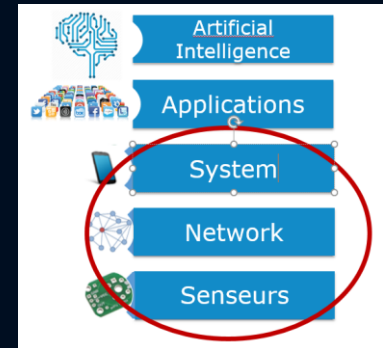
Step 4: Review of Full Applications, funding decisions and approval

Step 5: Project negotiations, funding award, announcements and signing of Contribution Agreements

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- **Innovation SuperClusters**

- **INO**, as the initial representative, filed the letter of intent of a SuperCluster with the support of:
 - **120** Industrial corporations : More than **\$1B** in collaborative R&D
 - The Federal grant supports projects, accelerating efforts to commercialize products
 - **40** Universities, colleges, associations and private research centres
 - The Government of Québec, with the recognition of poles of excellence in photonics, optics and electronics systems
 - Canadian academic network & provinces , with NRC, NSERC and Prompt support in CRD projects (Collaborative Research and Development)



Next steps

- Phase II preparation steps for « Full application »
 - Prepare Research program
 - Still accepting support letters
- Positive Answer from ISEDC (Innovation, Science and Economic Development Canada) expected within a few days...
- The T's and C's of the full application are still unknown up to now...

Important elements concerning the industrial commitment letter

- Project description
 - In connection with the 5 areas of activity mentioned
- Monetary commitment
 - Cash and in-kind
- Required collaborators
 - Emphasis on the ecosystems needed for the business success
 - Collaboration with open research centres
 - Collaboration with post-secondary institutions
 - Use of the local supply chain
- Creation of economic wealth
 - Jobs created
 - « Capex » investment required
- Commitment conditions from organization
- Research program elements in which you would be interested



Contact us if you have an interest to join the
adventure of **SENSING 4.0**

Normand Bourbonnais (c2MI) => normand.bourbonnais@c2mi.ca

Pierre Galarneau (INO) => pierre.galarneau@ino.ca

Any C2MI representatives at our booth for the next 2 days !