

Institute for Innovation and Technology Transfer







## Content

### Nuevo Leon's Innovation System

- Context:
  - Economic Data of Nuevo Leon
  - State Program in Science, Technology and Innovation 2010-2015
- Programs for funding R&D, innovation and graduate scholarships
  - State programs
  - Federal Funds



# **Economic Data of Nuevo**Leon

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



• USD \$2 750 M FDI (20% of Mexico)



## State Program in Science, Technology and Innovation 2010-2015

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León

The State Program in Science, Technology and Innovation is based in six strategies:

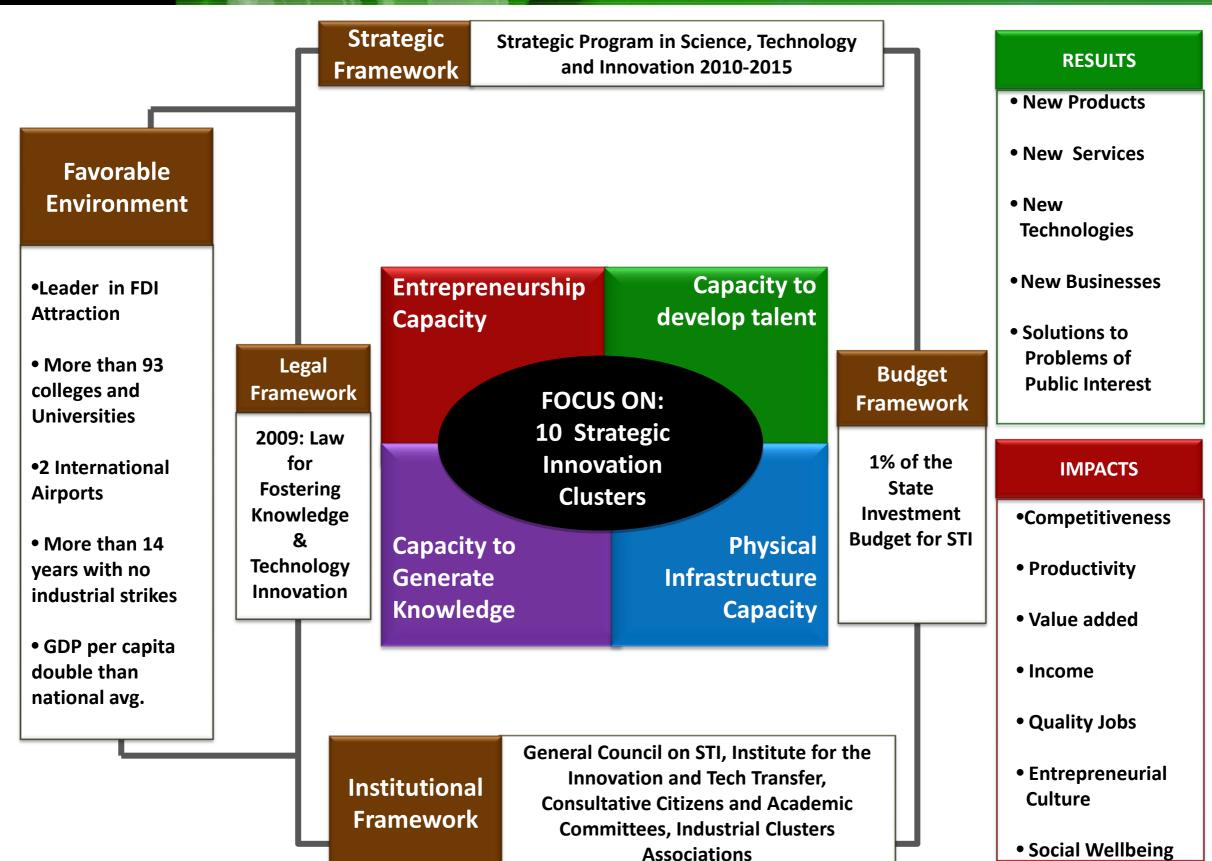
- **Strategy 1.** Developing **Human Resources** in Strategic Knowledge Sectors for Nuevo León
- **Strategy 2. Promote innovation** in the strategic productive sectors
- Strategy 3. Increase the Scientific and Technological Infrastructure
- **Strategy 4. Promote the Basic and Applied Research** in strategic sectors of Nuevo Leon
- **Strategy 5. Promote New Businesses based on Innovation**
- Strategy 6. Spread the impact of Science, Technology and innovation on the economic and social development at entity level.

To support the State's Innovation Ecosystem





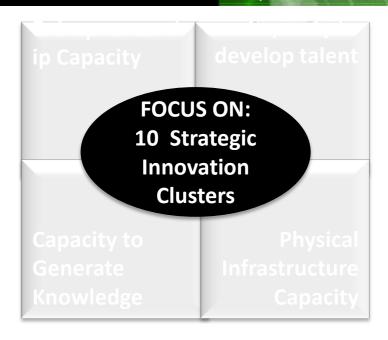
Impulsando la Economía y Sociedad del Conocimiento en Nuevo León







Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



- Operation supported by private & public funds
- Long Term Strategic Plan
- Strategic agenda and specialized committees:
  - Human Resources
  - Investment & Growth
  - Innovation

Triple Helix Model: Academy-Government-Industry: cooperation for competitiveness and growth.

#### 10 Strategic clusters:

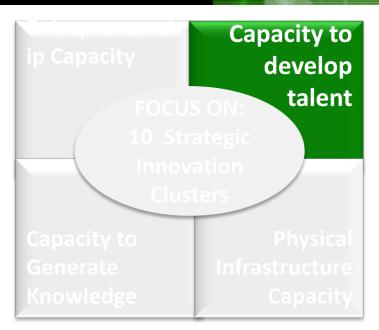
- IT & Software
- Automotive and autoparts
- Domestic Appliances
- Biotechnology
- Medical Services
- Agribusinesses
- Nanotechnology
- Aeronautics
- Multimedia and Creative Industries
- Sustainable Housing Development

The R&D and innovation funds are tailored to make these clusters more competitive.





Impulsando la Economía y Sociedad del Conocimiento en Nuevo León

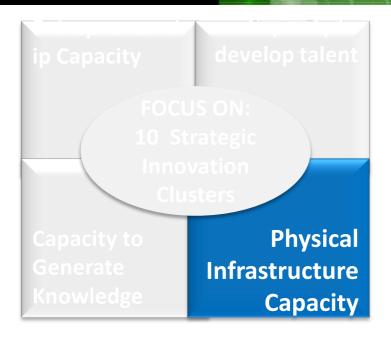


Human Resources for Research and Innovation

- Scholarships in strategic areas:
  - Sustainability and renewable energy
  - Health sciences
  - Pharmaceutical
  - Biotechnology
  - Material sciences and Nanotechnology
  - Information Technology
  - Agriculture, beverage and food sciences
  - Electronics
  - Aeronautics
  - Security
- Mechatronics, advanced manufacturing
- Logistics and supply chains
- We are looking for new partners with the best programs in these areas
- There are 200 scholarships available per year for studying abroad at PhD and MSC level
- The candidates must comply with a letter of intent of a local company/institution to hire them at the end of their studies



Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



- 85+ Research Centers belonging to Public and Private Institutions
- 10 Medium Technology Incubators
- 4 High Technology Incubators; 2 at PIIT (Nanotechnology and Biotechnology)
- 1 Research & Technology Innovation Park (PIIT)

We can facilitate contact with local universities to explore opportunities for joint dual degrees, student and professor exchanges, sabbaticals, etc.



## Research and Technology Innovation Park, PIIT

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



#### Member of:

- IASP (International Association of Science Parks)
- AURP (Association of Universities Research Parks) Member

#### 2012 - 2015:

- A total of <u>33 public and private research</u> centers and <u>4 High-Tech Incubators</u>
- USD \$350 million accumulated investment
  - USD \$100 million state & federal resources
  - USD \$250 million are third-party resources
- 6 000 scientists, technicians and support personnel

A thriving innovation ecosystem open to foreign R&D centers from universities and private companies.





## Research and Technology Innovation Park, PIIT

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



- 40 Ha land extension
- 20 new research centers
- A land investment of USD \$11 millions

### **Next Steps:**

- 20 new research centers
- Master Plan for 2 500 Ha adjacent to PIIT: Creative and Knowledge City





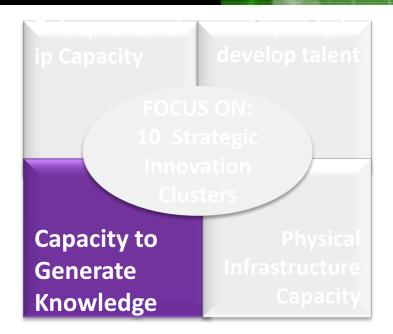
# Research and Technology Innovation Park, PIIT

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León

PADLEC			ROAGED		Centro da Investigación y de Entradox Avantación		
	Universities	Public Centers	Private Research Centers		Incubators		
4000	UANL (2)	IANL	Motorola		Nanotechnology	In operation	
	ITESM	CINVESTAV (2)	Pepsico - Gamesa		Biotechnology	Under Construction	
P. C.	UT	CIMAV	Sigma Alimentos	Inf	ormation Technologies	construction 2013	
ANL	UDEM	CIDESI	Monterrey IT Cluster/ LANIA	(Cd	Alternative Energy onceptualization stage)	Construction 2013	
auth l	UNAM (3)	CIATEJ	PROLEC - GE				
	ITNL	IIE	VIAKABLE				
	Universidad Regiomontana	CICESE	KATCON		Strategic areas:		
		CIMAT	METALSA		Sustainable	_	
			Schneider Electric		Nanotechnology Information Technologies Mechatronics and Robotics		
			CAINTRA/IMITPH				schneider
			QUALTIA		Heal <sup>.</sup> Adv. Manuf		S Flactor
			COPAMEX		Renewable		MAN LA DA
			ANCE		Biotechn		
No.			YAZAKI	l '			THE THE
	10	9	14		4		
TIAN TIAN							



Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



#### MIX FUND CONACYT - NL 2001-2011

More than USD \$185 millions of allocated funds in Science, Technology and innovation in the following modalities:

- Scientific research
- Technological development
- Training of human capital
- Infrastructure creation and strengthen
- Spread of science

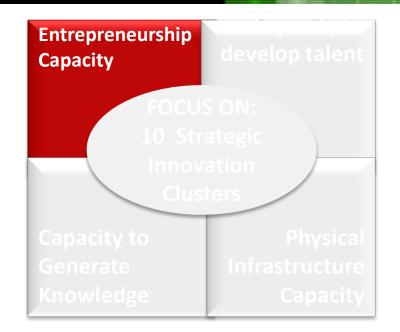
A total of 47 calls for proposals and 218 projects approved

#### FEDERAL INNOVATION FUNDS

The funds may be used for international cooperation in projects and to establish dual degree programs



Impulsando la Economía y Sociedad del Conocimiento en Nuevo León



### **NUEVO LEÓN'S FUND FOR INNOVATION (FONLIN)**

- New products or services proposals based on scientific and technological innovation that are in a precommercial stage
- The economical support depends on the nature of the project and the availability of the fund
- Runtime 2 years maximum
- Concurrent funds CONACYT, I2T2, FUNTEC, IADB
- Angel Capital:
  - Monterrey Global Ventures

We are open for entrepreneurs that would like to establish their technology based companies in Nuevo Leon.





### **CONACyT's Science and Technology Policy Mix of programs and** instruments

Impulsando la Economía y Sociedad del Conocimiento en Nuevo León

#### **Basic Science**

#### **Ministry of Education CONACYT** s **Fund**

- New knowledge generation
- Human Capital **Education** (Postgraduate programs, young talents and postdoctoral grants)

#### **Applied** Research

### **Technology Development**

#### **Sectorial and State Funds**

- Oriented to solve National Problems and priorities
- New Product and Processes development (grants up to 50%)
  - Research infrastructure

#### International EU Fund

 Strengthening research networks

#### Incentives for research and innovation (INNOVAPYMES, PROINNOVA, INNOVATEC)

 Funds to promote linkages university- industry, private research centers

#### **Business-Technology Integration**

#### CONACyT's funds for:

- 1. Seed capital
- 2. Risk capital
- 3. Credit lines
- 4. Innovation Consortia
- 5. Patenting
- 6. Technology **Transfer Units**

- Private **Investors**
- Entrepreneurs
  - Business **Schools**
  - Business **experts** (Mentors)
  - Innovation networks Public/Private alliances

High Value Added **Businesses** 

New Services and **Products** technology based

**Pre-commercial Stage** 

**Business Generation** 

**Commercial** 

All of these programs have the component of international cooperation



### In conclusion

## All of the programs may allocate funds for the component of international cooperation, such as:

- Scholarships for PhD or Master
- Student exchange at graduate level
- Professor exchange
- Joint collaboration in R&D projects
- Sabbaticals
- Dual degree programs
- New international businesses

### Contact

Jaime Parada CEO jaime.parada@mtycic.org

#### Martha Leal

Planning, Graduate, Outreach and International Cooperation Director <u>martha.leal@mtycic.org</u>

#### Oscar Vázquez

Innovation, New Businesses, Scientific and Technological Infrastructure and Research Networks Director oscar.vazquez@mtycic.org

#### Maura Mendoza

Financial Director Maura.mendoza@mtycic.org

www.mtycic.org





