



# Policy Needs to Reach Market Transformation

**KTH, Royal University of Technology**  
**Stockholm, Sweden**  
**May 23, 2022**

**Denis Tanguay**  
President & CEO  
Canadian GeoExchange Coalition



# ***Who are we?***

## **Mission**

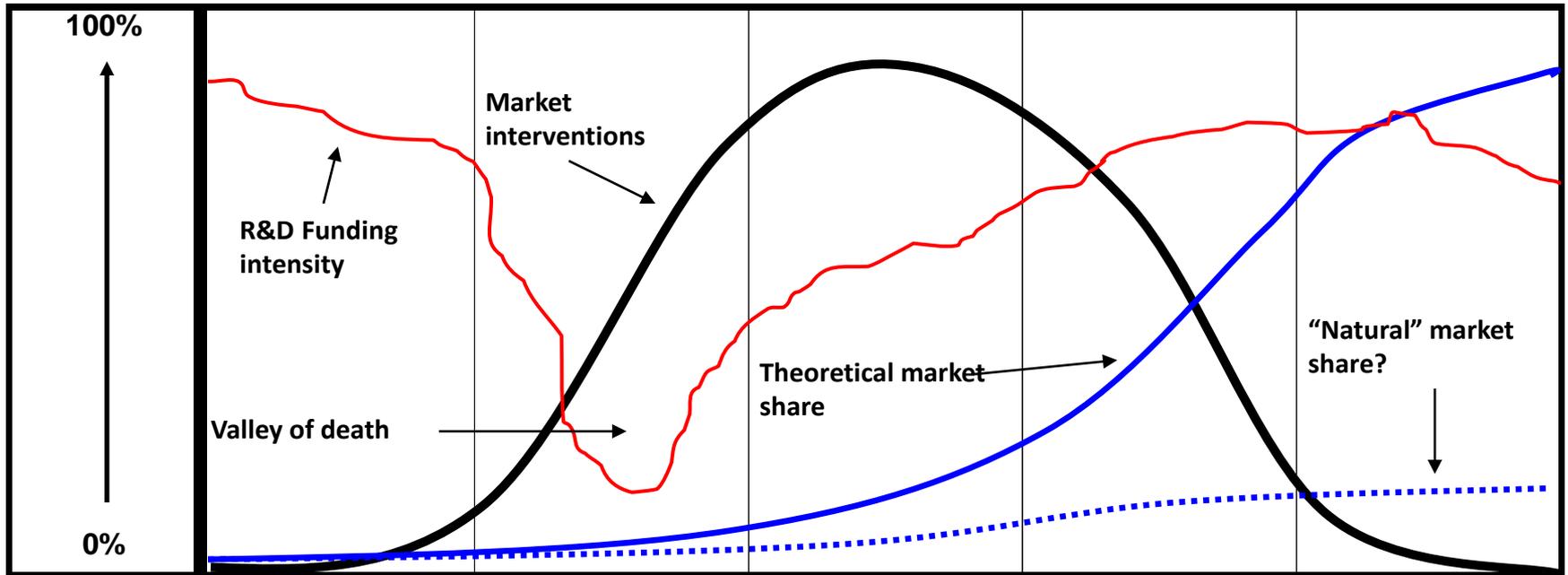
The Canadian GeoExchange Coalition acts as the industry catalyst to unite private and public sector stakeholders, and to expand the market for ground source heat pumps and geexchange™ technology in Canada and abroad. As the nexus of information, training, certification, standards and public awareness, our mandate is to work with stakeholders to build the necessary infrastructure to foster the growth of the Canadian geexchange™ industry.

## **Membership**

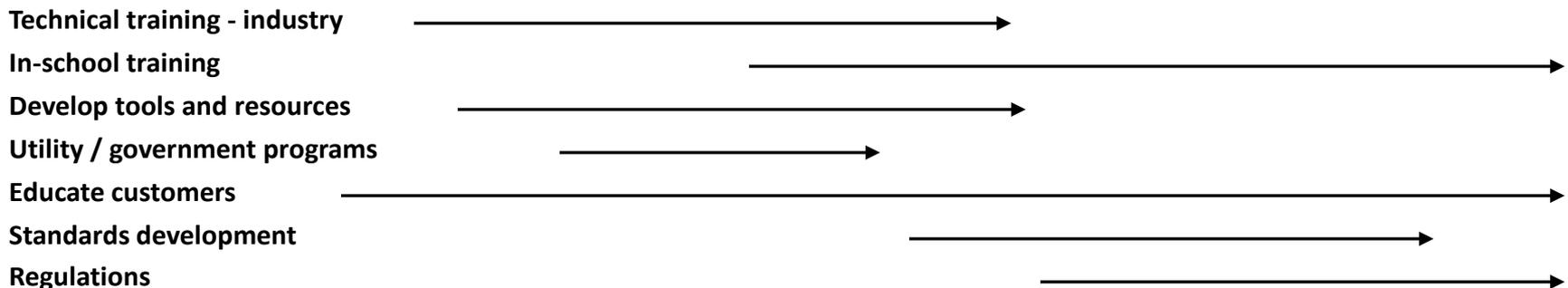
- Equipment Manufacturers and Distributors
- System Designers (Architects & Engineers)
- System Installers
- Energy Distribution Companies (electric and natural gas)
- Financial, legal, other industry support services
- Research centers, academic institutions
- Building owners & managers, Developers, Facilities managers, and Governments
- Industrial / Professional Associations



# Technology Adoption Lifecycle Challenge



Phase	Pilot	Program	Commercialize	Propagate	Maintain
Goal	Raise Awareness	Demonstration	Remove Barriers	Transform Market	Sustain Market
Market	Innovator	Early Adopter	Early Majority	Late Majority	Laggards



# *Market Transformation*

- Policy needs to reach market transformation
- What policy needs to reach market transformation

Policy may not be sufficient

- Policy will not necessarily work on its own
- Industry/customer “buy-in” or “buy-out”



# *Market Transformation*

1990s – Renewable Energy Deployment Initiative (focus on electricity supply)

- Worked well for solar / wind
  - Strong industry buy-in
- Didn't work for HP
  - Very low electricity prices: 5-10 cents / kWh
  - No industry support

2002 and beyond (Energy efficiency in buildings – focus on energy demand reduction)

- Supported by subsidies
- Supported by strong industry initiatives



# *Market Transformation*

3 levels of government / different policies and priorities

1) Federal (1)

- ✓ No constitutional authority over energy supply (authority over energy trade – interprovincial / international)
- ✓ Constitutional power to spend

2) Provincial (10 + 3 territories)

- ✓ Constitutional authority over energy supply... In their province

3) Municipal (3000 +)

- ✓ Creations of provincial governments
- ✓ Authority over urbanism and territorial use



# *Market Transformation*

Need for a coordinated approach

- ✓ Federal government cannot force municipalities to adopt policies
- ✓ Provincial government can influence municipalities
  - ✓ Green Act in Ontario: “forbidden to forbid”.
- ✓ Municipal
  - ✓ Can use block roads like building code applications ie. Play by the book
  - ✓ Safety regulations
  - ✓ Labour regulations



# *Market Transformation*

Policy push (governments) needs a policy pull (industry / consumers)

## Push

- ✓ Organization of the supply side
  - Adequate standards, regulations, permits
  - Financial assistance, feed-in tariff, renewable heat tariff, etc...
  - Legislation: max kWh/m<sup>2</sup>

## Pull

- ✓ Organization of the demand side
  - Self-regulation: training, accreditation, education, etc...
  - Private financing
  - R&D, deployment



# *Market Transformation*

## Key to success

- Driven by governments – supported by industry
- Driven by industry – supported by governments
- Driven by industry – not necessarily supported by governments

## Risk of failure

- Driven by governments – not supported by industry  
(Industry driven by competition – path of least resistance)

## Grants and financial assistance

- Useful bonus but not necessary



## ***CGC Market Transformation Initiative***

- Industry driven : the market transformation infrastructure to support the growth of the industry = ***CGC Global GeoExchange Quality Program***<sup>®</sup>
- Strategic : create a strong and ***even more*** professional industry through our training programs and partnerships – build a labour force
- Establish self-regulation and quality control mechanisms
- Preserve the integrity of the entire industry
- Contribute to consumer protection (technology and financial risk reduction)
- Answers the need to tighten the implementation of codes and standards
- Create the necessary mechanisms for this industry to play a major role as a renewable and reliable energy source across Canada
- Deployed nationwide since February 2007



***THANK YOU FOR YOUR KIND ATTENTION !***

**Denis Tanguay**

President & CEO  
Canadian GeoExchange Coalition  
1030 Cherrier – Suite 405  
Montréal (Québec) Canada H2L 1H9

+1 514 807 7559

[www.geoexchange.ca](http://www.geoexchange.ca)

[denis@geoexchange.ca](mailto:denis@geoexchange.ca)

