

# Positioning R&D to Maximize Innovation Outcomes

Createch Connect: Idea to Market  
October 16 – 20, 2006

# Public Investments in R&D

- Benefit to Chileans and Chile
- Create wealth and prosperity
- Expectation of commercialization outcomes: disclosures, patents, licenses, new products/processes
- Expectation of broader benefits: industry, environmental, social

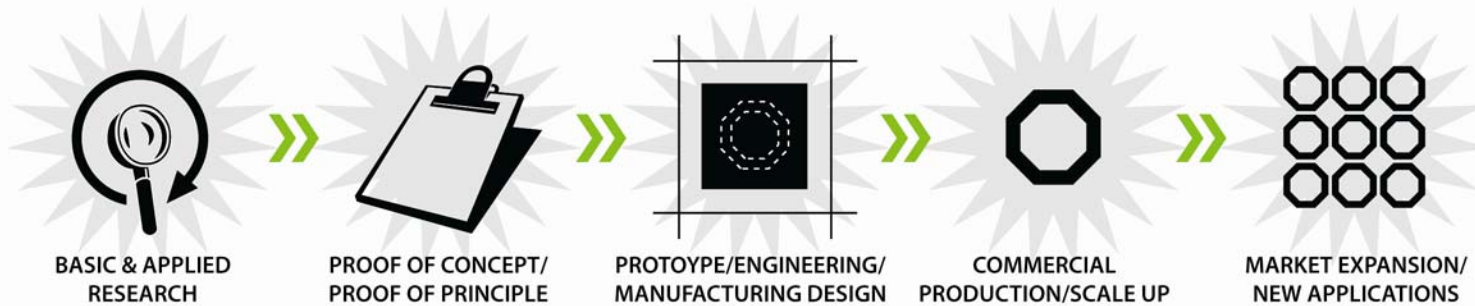


# Positioning R&D to Maximize Innovation Outcomes

- Innovation Value Chain
- Stakeholder Profile
- State of Knowledge Review
- Market Profile
- Spillovers
- Rationale
- Knowledge Transfer Strategies
- Benefits



# Innovation Value Chain



- Identify innovation partners, collaborators, stakeholders
- Identify gaps in the IVC – where there might be good points for entry (R&D opportunities)

# State of Knowledge Review

- What do we already know?
- How are we using it?
  - Products/processes/services
  - Policy/legislation
  - Standards/regulations/practices
  - Programs
- What is emerging?
  - Patents
  - R&D
- Where are the gaps?

# Spillovers: Indirect Path to Commercialization

- Show characteristics of R&D that increase likelihood for spillovers:
  - Multi-use technology
  - Proof of concept that can be applied to various problems
  - Path-breaking knowledge
  - Useful knowledge gained without commercialization element
  - Difficult-to-keep secret innovation
  - Key component leading to redesign/improvement of multiple systems



# Rationale

- What is the rationale for the research:
  - Scientific
  - Technical
  - Market
  - Regulatory
  - Environmental
  - Social
  - Policy
- Validate

# Knowledge Transfer

The final impacts of research are not only a product of the research results.

They are also a product of the processes by which the research results are disseminated, adopted and translated by users of the research

PhillipsKPA 2006. [://www.dest.gov.au/NR/rdonlyres/36818C20-9918-4729-A150-464B662644B3/12630/Knowtran\\_FinalCompilation\\_005\\_web1.pdf](http://www.dest.gov.au/NR/rdonlyres/36818C20-9918-4729-A150-464B662644B3/12630/Knowtran_FinalCompilation_005_web1.pdf)



# Knowledge Transfer

- The process of engaging with a wide diversity of non-research users

# Knowledge Transfer Framework

- ***The Message***: What should be transferred to users?
- ***The Users***: To whom should the results be transferred?
- ***The Messenger***: Who is transferring the knowledge?
- ***The Process***: How is Knowledge transferred?
- ***The Effects*** – How should outcomes be measured?

Lavis, J. et. al 2006.

# Knowledge Transfer Processes

Knowledge  
Transfer

Knowledge  
Access  
Make knowledge  
accessible

Knowledge  
Production  
Sell knowledge  
products

Knowledge  
Relationships  
Sell knowledge  
services

Knowledge  
Engagement  
Engage to achieve  
mutually beneficial  
outcomes

PhillipsKPA 2006

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# Determinants of Knowledge Transfer

- Focus of research projects on users' needs
- Linkages between researchers and research users
- "...researchers transferred knowledge much more actively when no commercialization was involved than when there was commercialization of protected intellectual property."

Landry, R., N. Amara, M. Ouimet. 2006.

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“Over long periods of time, two-way exchange processes that give equal importance to what researchers can learn from users and what users can learn from researchers can produce cultural shifts. A decision-relevant culture can be created among researchers, and a research-attuned culture can be created among users”

Lavis, J. et. al 2006.

