



Session 2:

# **STI Policy instruments to foster demand for innovation**

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## **Overview of the presentation**

- Context:
  - Demand as a driver of economic development
  - Supply and demand for innovation: two sides of the same coin
- Typology of demand-driven innovation policy instruments
- Key messages



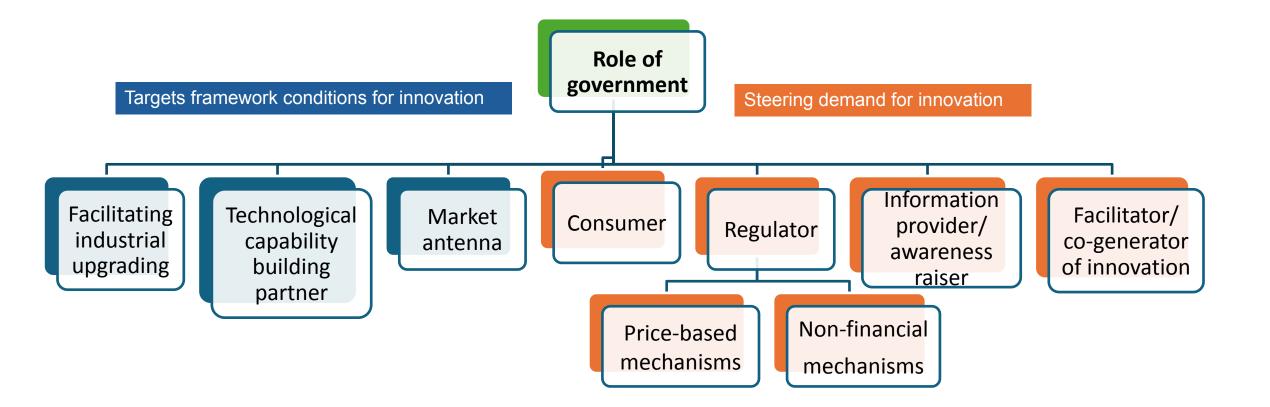
#### Context

- Remember some basic economic principles:
  - Supply + Demand and their interactions in the market
  - R&D (variety creation) competition (selection mechanism)
- Pressures to re-balance domestic productive structures (industrial development priorities):
  - Competitiveness + Economic diversification + Strategic autonomy
- Interest in leveraging/shaping domestic demand as a driver of industrial leadership, trade competitiveness and employment creation:
  - <u>Consumers</u> (private demand) <u>as change agents</u>
- Industrial policy and innovation languages increasingly converge to provide policy space
  - Focus on demand
- Implications for policy coordination in a globalized world?





#### **Typology of demand-driven innovation policy instruments**



Nature of demand/ role of government	Description of intervention	Examples of interventions
Framework condition		
Facilitator of industrialization and upgrading	Remove market failures so that firms can build on comparative advantages to take advantage of external demand conditions or opportunities for industrialization.	<ul> <li>Fiscal, monetary, exchange rate and employment policies</li> <li>Provision of credits or loan guarantees</li> <li>Incentives for foreign direct investment (FDI)</li> <li>Export promotion and competition policies</li> </ul>
Technological capability- building partner	Promote adoption, use and (eventually) development of technologies that enhance knowledge bases and presence in domestic and international markets.	<ul> <li>Selective industry protection</li> <li>Creation of public research centres</li> <li>Promotion of corporate research and development (R&amp;D)</li> <li>Technology transfer mechanisms and joint venture agreements</li> <li>Export promotion</li> <li>Import substitution</li> <li>Selective FDI</li> <li>Skills training</li> </ul>
Market antenna	Help domestic agents identify or anticipate changes in technologies with implications for the dynamics of manufacturing.	<ul> <li>Foresight services and market intelligence</li> </ul>
Actionable variable		
Information provider and/or awareness raiser	Influence consumer knowledge, awareness, readiness and capabilities to consume certain manufacturing products.	<ul> <li>Communication, education and awareness-raising campaigns</li> <li>National brands</li> <li>Voluntary labelling</li> </ul>
Regulator	Stimulate and regulate consumption of manufacturing products or influence consumer behaviour through changes in relative prices.	<ul> <li>Fiscal (taxes, tariffs, quotas, subsidies, tax credits or exemptions); monetary; and exchange rate policies</li> </ul>
	Influence consumption of manufacturing products or guide consumer behaviour through laws, directives and regulations.	<ul> <li>Mandatory standards and labels</li> </ul>
Enabler/co-generator of innovation	Promote, enhance or create demand for innovative products by targeting final users.	<ul> <li>Grants and subsidies for consumption of innovation</li> </ul>
Consumer	Promote consumption of manufacturing products, guide strategic investments in innovation, address societal needs through provision of manufactured goods and ensure a market for strategic industries or economic activities.	<ul> <li>Public procurement</li> </ul>

Source: UNIDO elaboration based on Santiago Rodríguez and Weiss (2017), Santiago Rodríguez et al. (2017) and Lin and Chang (2009).





#### **Key messages**

- The international context offers potential to pursue home-grown innovation, as part of industrial development strategies. While the emphasis on national interest may sideline countries with insufficient innovation capacities.
- By fostering demand for home-grown innovation, developing countries can tap into broader (technological learning) opportunities and tools available to foster industrialization.
- Governments can play many different roles and pursue several policy outcomes through demand-driven innovation policies.
- Supply- and demand-driven interventions, and their interactions and complementarities, are at the basis of successful innovation-led development strategies.
- The choice of demand-driven industrial policy instruments depends on desired development outcomes, differences in market structures and consumers' behaviours. Important to consider is timing and duration of interventions and the speed of adjustment in consumer behaviours.
- Demand-driven innovation policy instruments can contribute to equitable and sustainable development by setting specific strategies and targets in relation to such goals (directionality), while it is also possible for the policy process underpinning demand driven intervention to be an inclusive process itself.





### Thank you