

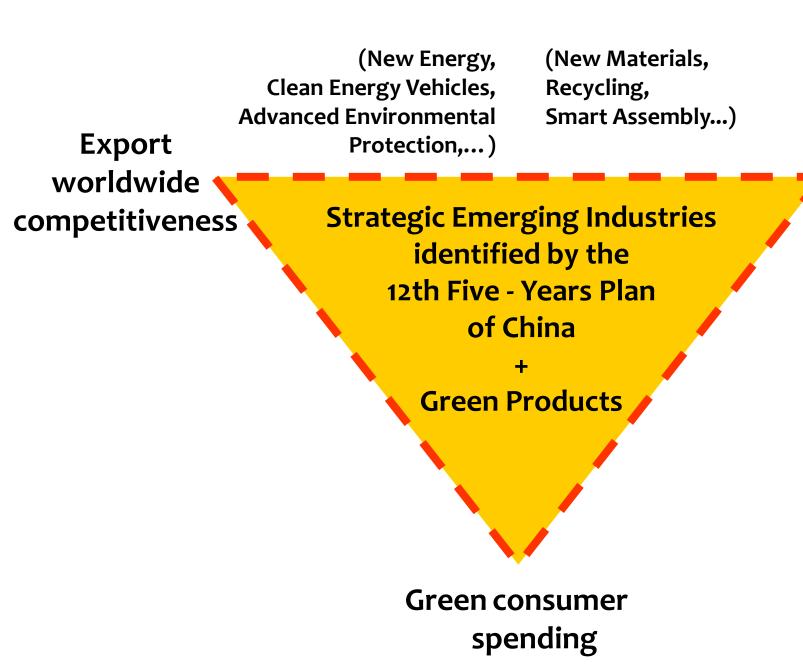
# Nurturing China's Strategic Emerging Industries and Green Products through Five Innovative Economic Policies

#### Valentino Piana

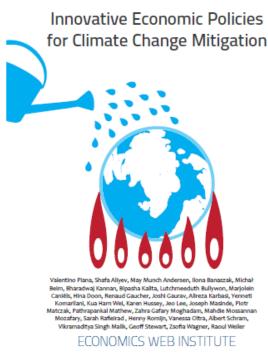
Director of the Economics Web Institute: cutting-edge research and implementation consulting

director@economicswebinstitute.org

Guangzhou, 20th October 2012 Low Carbon Earth Summit



Sustainable domestic market development



**Road maps Action plans Delivery of qualitative** and quantitative targets:

> Sales **Profits Investments Employment Reduction of GHG** emissions

> > **GDP** growth **Quality of Life Happiness**

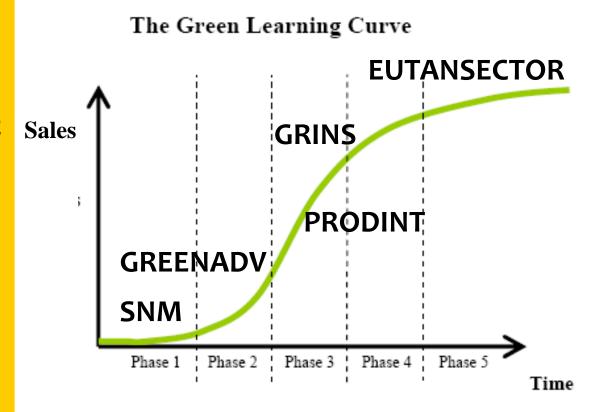
Your understanding of opportunities and constraints

24 detailed economic policies, with innovative approaches, specific phases and timing, to change market functioning, sectors, firm behaviours, consumers spending habits

> Download this book from www.economicswebinstitute.org/policymakers

5 policies are particularly suitable to China, depending on the stage of your product and sector:

- 1. Strategic Niche Management (SNM)
  - 2. Free Advertising of Green Products (GREENADV)
- 2. Pro-Diffusion-of-Innovation-Tax (PRODINT)
  - 4. Green Innovation System (GRINS)
    - 5. Sectoral Euthanasia (EUTANSECTOR)



Each acronym is one policy, described in one chapter of the book.

# 6.1 Nurturing Strategic Emerging Industries across all their industry life cycle



Goal: Transition in market structures and firm behaviour

# **Policy name: Strategic Niche Management**

Context

**Strategic Emerging Industries** require a nurturing context, stimulating competences, connections, and successful diffusion of prototypes

4-6 Months

adoption Time for

The creation of socio-technical experiments in which stakeholders are encouraged to collaborate and exchange expectations, information, knowledge and experience, thus embarking on an interactive learning process that will facilitate the incubation of the new technology. This occurs in a protected space called a niche, a specific application domain for the innovation, mixing special needs of demand and special features of supply.

8-20 Months

Time for sizeable results

Advantages

Description

Survival of the greenest National competitive advantages in special niches Highly qualified employment

Monterotondo (Italy)

### 6.4 Nurturing Strategic Emerging Industries across all their industry life cycle



Goal: Transition in income distribution, consumer lifestyles and purchasing rules

**Policy name: Free Advertising for Green Products** 

Context

Mass consumption is oriented by effective advertising.

Green products are still a small niche, expensive because they cannot exploit economies of scale

2-8 months

adoption

Description

Free provision of airtime in television for advertising of specific brand, retailers, and eco-labels that can demonstrate their environmental-soundness. In cities, free outdoor advertising spaces, such as billboards.

1-6 Months

Time for sizeable results

Advantages

Large and immediate boost in sales of green products
Boost of profits, investment and green jobs
Reduction of emissions
Pressure to obtain green certificates

Turin (Italy)

# 6.5 Nurturing Strategic Emerging Industries across all their industry life cycle



Goal: Transition in income distribution, consumer lifestyles and purchasing rules

Policy name: Pro--Diffusion-of-Innovation Tax



Pioneers in adoption of clean technologies are very few, with large installed capital stock being old and polluting.

6-12 months

Time for adoption

Description

A repetitively-applied tax on owners of "polluting" goods, whose total revenue is distributed as a subsidy among recent adopters of clean goods.

6-12 Months

Time for sizeable results

The tax can be small but would generate a large revenue, which divided by the few adopters would produce a large subsidy

Clear advantages for adoption of new technology Large increase in sales, profits, investments and jobs for green producers No fiscal cost

Sardinia (Italy)



#### 6.8 Nurturing Strategic Emerging Industries across all their industry life cycle



Goal: Transition in market structures and firm behaviour

**Policy name: Green Innovation System** 

Context

Technology is partly endogenous to the economic system. A new direction of innovation efforts and their selective success would drastically change the ease of low-carbon processes and products.

1-4 Years

adoption Time for

Description

Advantages

Comprehensive dynamic policies for wiring up the national system for ecoinnovation. This policy aims to mould the market and create a selection environment that favors eco-innovation at every stage of deployment. 5 stages of industry greening are identified and given appropriate policy measures. Innovation in protection of Intellectual Property Rights.

1-2 Years

Time for sizeable results

Indepenent and endogenous innovation Building national competitive advantage in niches and sectors of the future-oriented economy Highly qualified jobs

**Denmark** 

# 6.7 Nurturing Strategic Emerging Industries across all their industry life cycle



Goal: Transition in market structures and firm behaviour
Policy name:
Sectoral Euthanasia in Highly-Polluting Regions

Context

The national and international community cannot ignore the vital interests of heavily polluting regions. They have suffered the most in the industrial age in exchange for an uneven material welfare they fear to lose in the transition, while it instead should be carried out painlessly to avoid brakes and obstacles.

8-24 Months adoption

Description

Useless pain should be avoided by a number of measures that, systematically linked in a comprehensive strategy reflecting local circumstances, result in sectoral euthanasia.

4-24 Months description of the size able results

Advantages

Reduced resistance to mitigation national policies Employment Structural shift of local economy to future-oriented sectors

Brindisi (Italy)

climate change mitigation
is a great opportunity for development, if
appropriate strategies are undertaken at firm,
sector, city, region and national levels.

Let's develop a clean future together!