Session IV How to overcome barriers to green growth in emerging economies - The Asian situation -



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Challenges in Asia are huge!





Working with emerging economies for green growth Environmental status Asia

- Low emitters on CO2 at a per-person basis but large contribution in absolute terms
- Special richness (70% of all species on Earth) but endangered
- The most polluted cities in the world
- Increasingly water stressed
- Increasing scarcity of safe drinking water



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Growing volume of hazardous waste, lack of proper land-filling, becoming

international dumping grounds





Position of Asia

Becoming the world's main manufacturing hub:

by 2020, 70-80% of the world's industrial manufacturing

<u>SMEs</u> constitute more than 80% of the companies (>30 million, excluding the SSI's)





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Position of Asia



The most significant trend in the Asian region is the <u>rapidly growing middle-</u> <u>income class</u> (as part of urbanisation) that strives to adopt the affluent consumption patterns of wealthier people

11th European Forum on Eco-Innovation Working with emerging economies for green growth The relevance of SME's

SMEs backbone of global industrial infrastructure:

- Worldwide over 90% of the enterprises are SME's
- In Asia over 30 million
- 60-70% of total employment
- And ~ 50% of the GDP
- Crucial position also for innovation
 But also:
- Insufficient use of raw materials
- Up to 70% of the pollution emissions Due to:
- Outdated and low efficiency technology
- Lack of preventive maintenance
- Improper production management



Achievements

- Numerous good case studies (pilots) in variety of industrial sectors and services
- In general adequate, customised tools developed
- Customised training materials / manuals available
- Growing capacity amongst service providers (not in all countries) sometimes institutionalised
- SD / SCP is generally considered relevant and its relevance is on the rise
- Several policies / strategies / legislation in place

But still insufficient, due to barriers

- Lack of effective information diffusion
- Political and economic barriers, trade and policy barriers
- Lack of full cost pricing
- Lack of understanding of local needs
- Business limitation such as aversion to risk by FI's
- Inadequate environmental codes and standards
- Intellectual property rights

4th European Forum on Eco-Innovation, Vienna 2008



Barriers (1)

- Policies and legislation are not always adequate and sometimes even conflicting but certainly lack proper implementation due to <u>lack of awareness at local level</u> and certainly lack of <u>enforcement</u>
- <u>Dialogue structures</u> between industry-government-civil society in immature stage







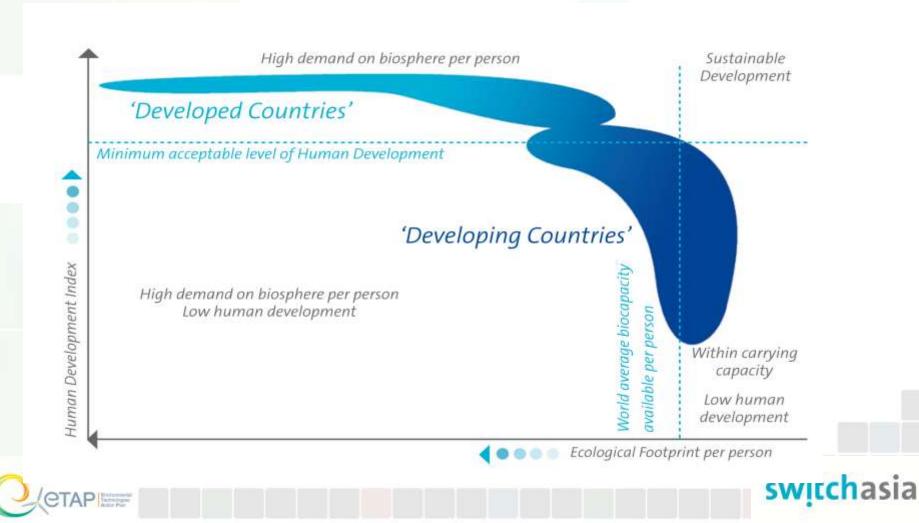
Barriers (2)

- SCP does not spread naturally, especially not within <u>SMEs</u> which lack access to information a/o know-how to interpret information necessary for customised implementation
- <u>Exchange mechanisms</u> for information on successful SCPexperiences inadequate
- Lack of an adequate '<u>mid-field</u>', industries representing associations





The goal: Leapfrogging



Challenges (1)



- Go beyond demonstration projects -DIFFUSION / create <u>multiplier effects</u>
- Go beyond 'low hanging fruits' induce spin off towards <u>customized</u> <u>Eco-innovation</u>
- Not only technology fix
- Effectively address <u>SMEs</u>
- Develop / strengthen / involve local and regional <u>business networks</u>

SCP – Challenges (2)



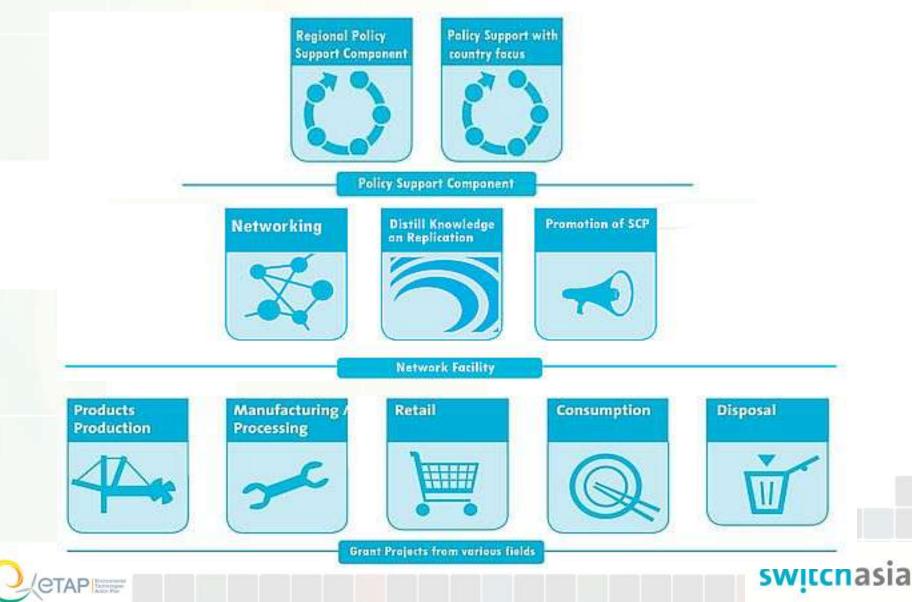
- Address the (end) market !
- Raise awareness of and interest for <u>'green products'</u>
- Make existing tools better known, accessible and applicable, especially <u>SC-tools</u>
- Facilitate adequate access to and utilisation of <u>information</u>
- Apply innovative new (SC) <u>policies;</u> <u>eco-labelling</u>, leverage via <u>green</u> <u>public procurement</u>



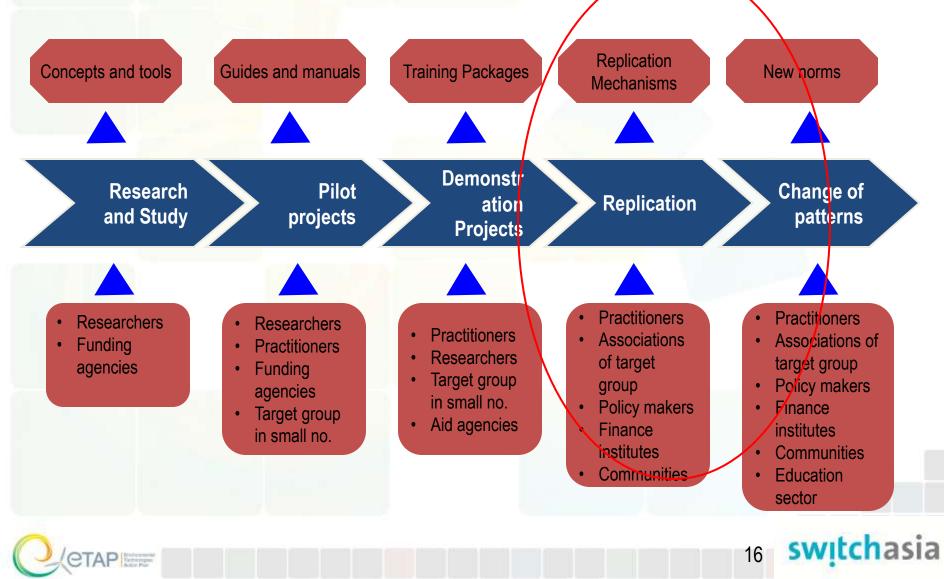
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11th European Forum on Eco-Innovation Working with emerging economies for green growth Structure of SWITCH-Asia



SWITCH Focus > REPLICATION



Diffusion of technical innovations



- Enhance uptake of available innovations (further market penetration)
- If possible with indigenous or locally produced technology
- Induce further development of 'new' innovations



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Embedding in systems !



Too often improvements are seen as isolated, individual technical improvements – technology fix - without organisational and behaviour change



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Success factors !

- Offer solutions instead of just selling products
- Secure support systems
- Understand local circumstances
- Work with local partners

Thank you for your attention!

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