Latin American Carbon Forum

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T8 - Moving towards Low Carbon Technologies and Cleaner Production Processes

"Lessons learned from some autonomous behavior and a macro approach"

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Study Case Approach

Some actions

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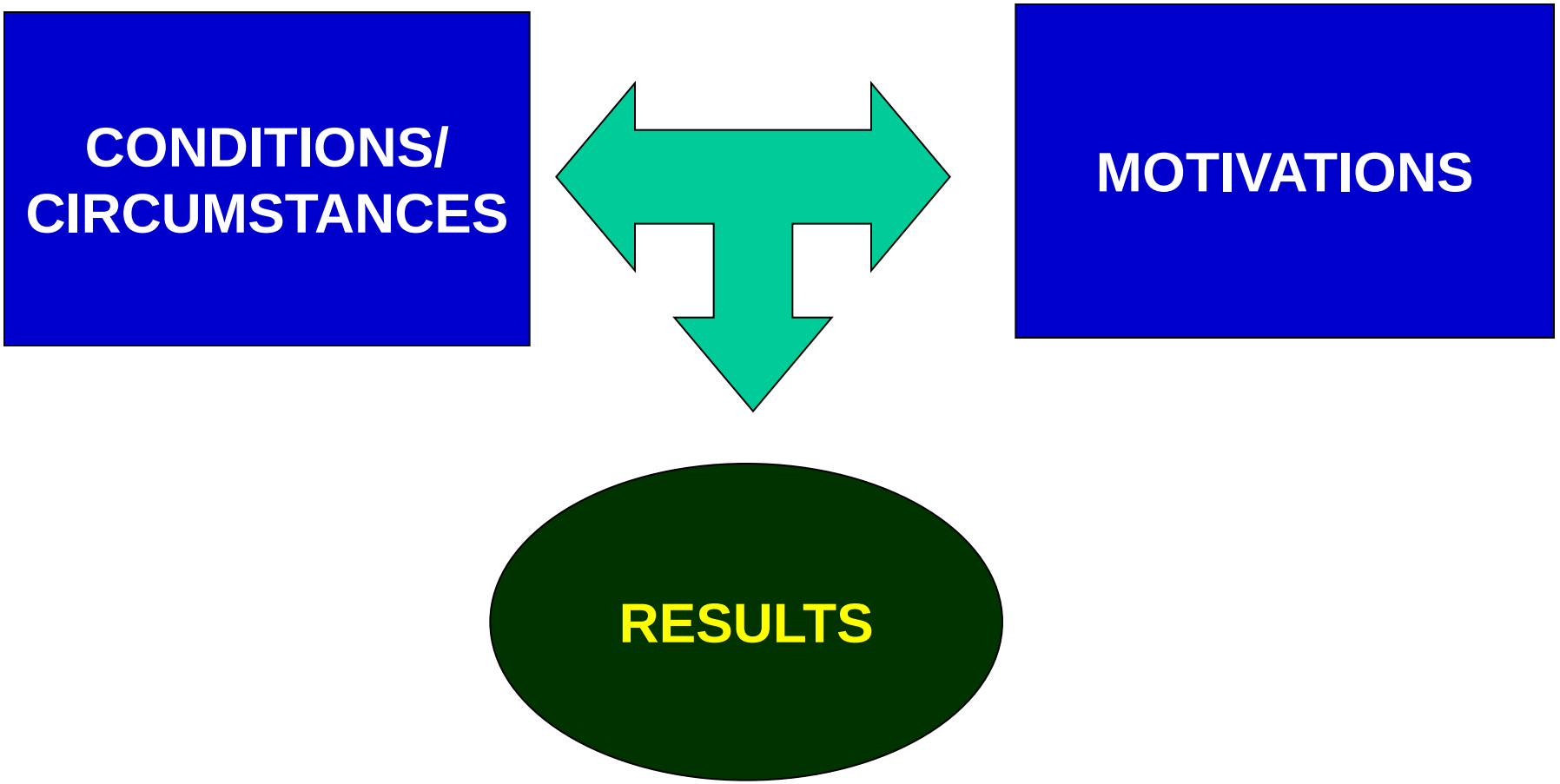
1. Energy substitution in thermal processes.
2. Packaging optimization.
3. Water management.
4. CO2 recovery.
5. Foot carbon and foot water print calculus and actions.
6. Methane recovery and use as fuel in thermal processes.
7. Electricity efficiency.
8. Solvent reduction in chemical industry.
9. Liquid waste management.
10. Liquid waste reduction to zero.
11. Use waste of related industry as fuels .
12. Production functions improvement in appliances production.

Underlying reasons



Conditions/Circumstances

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1. Relative development/high level of industrialization/technical knowledge
2. Technology available at market level, internally developed or transfer from matrix
3. Profitable actions and good IRR →
4. Good level of capacity and human resources
5. Staff with knowledge on energy efficiency
6. Availability of alternative energy sources
7. No reference to the need of financing
8. Low investment and nearly to zero.
9. In general they are important utilities
10. National or multinational stakeholders
11. Several multi-product or diversified utilities
12. No reference to oriented policies

Motivations

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1. Higher economic efficiency
2. More productivity
3. Access to ISO norms
4. Increase competitiveness
5. Access to new markets or consolidation of share
6. Social responsibility programs
7. Accomplish with directions coming from matrix
8. Environmental management and not only cc.
9. Waste management to increase productive efficiency
10. Higher vertical and horizontal integration

Results

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1. All the actions have positive impacts on mitigation of GHG
2. Sustainability is related to the social and environmental dimension
3. Very few references to Climate Change
4. More references to eco-efficiency and social responsibility
5. Not necessary depends from national strategies

Macro Approach

Energy General View

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INDUSTRIAL DE VELOPMENT: Productivity and Energy Intensity

VIRTOUS CIRCLE: From NR intensity To Technology Intensity

Structural Issue

Reduce Productivity Gap to Reduce Energy Gap

DILEMMA: INDUSTRIAL STRUCTURE

Challenges

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1. Productivity, Energy and Sustainable Development
2. Convergence in productivity and energy efficiency →
3. Industrial Evolution: Natural Resources intensives to technology intensives. Predominant LA Industry is still in the first phase.
4. The need to reduce the productivity gap and the energy gap.
5. Industry structure: Engineering, work, NR

The way forward

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1. Cleaner path is not an environmental factor or issue
2. Technology and Productive capacities, R&D, institutional capacity
3. More convergence in productivity is needed in the 3 sectors.
4. Sustainability depends on going to sectors with technology and productivity dynamic and less energy intensive.
5. Change in industrial structure will be the best way to reduce emissions.

Virtuous circle

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Thank you very much!

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