

GREENING THE CONSTRUCTION CHAIN THROUGH CLEANER PRODUCTION & ORGANIZATIONAL LEARNING

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Traditional CP transfer Methodology

Technical subsequent phases

CP PROJECT / PROGRAM

Planning Phase

Assessment – CP
Diagnosis
(quick scan methods)

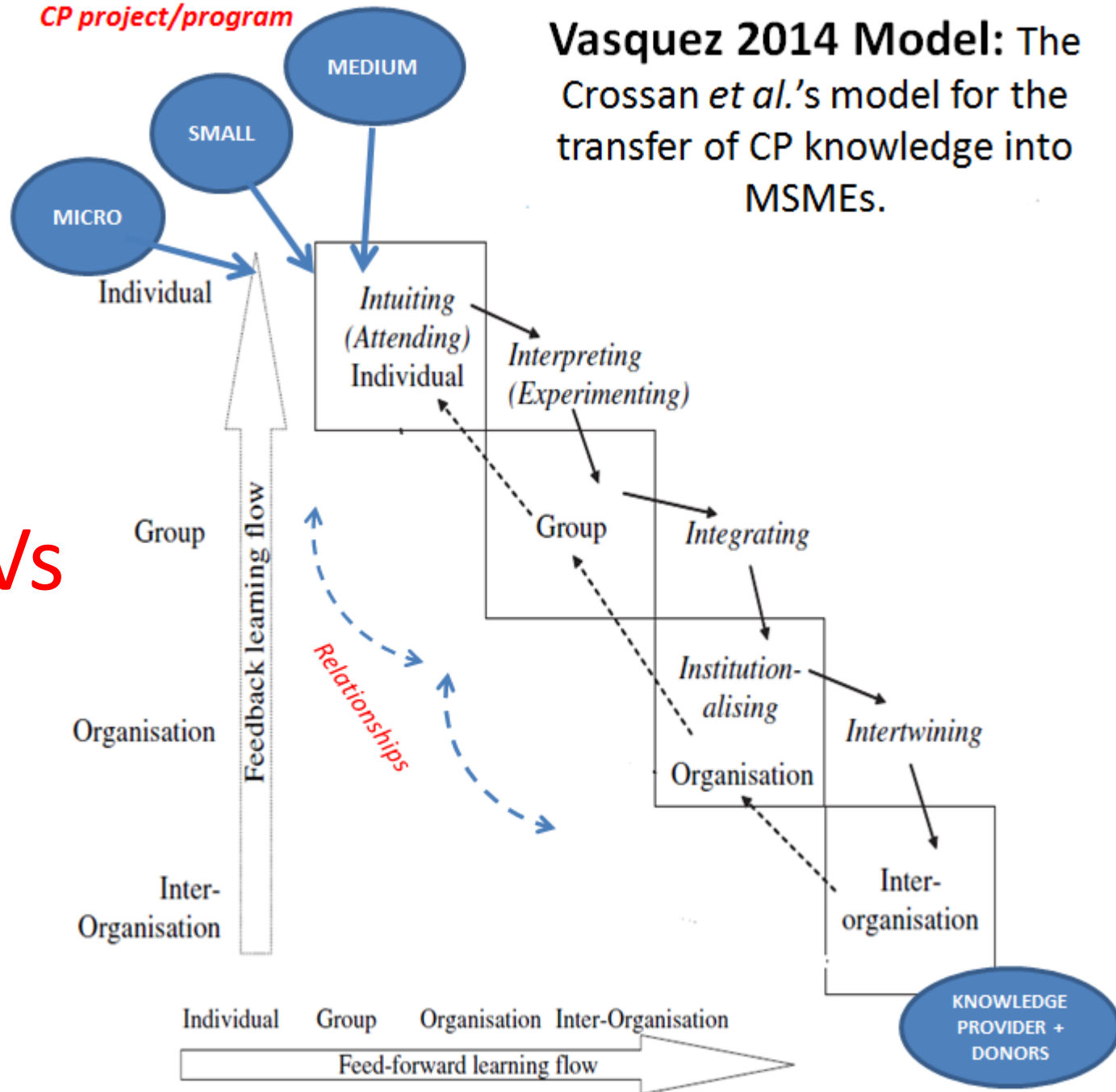
CP Action Plan

Implementation of CP
alternatives

Monitory and
evaluation phase

VS

CP project/program



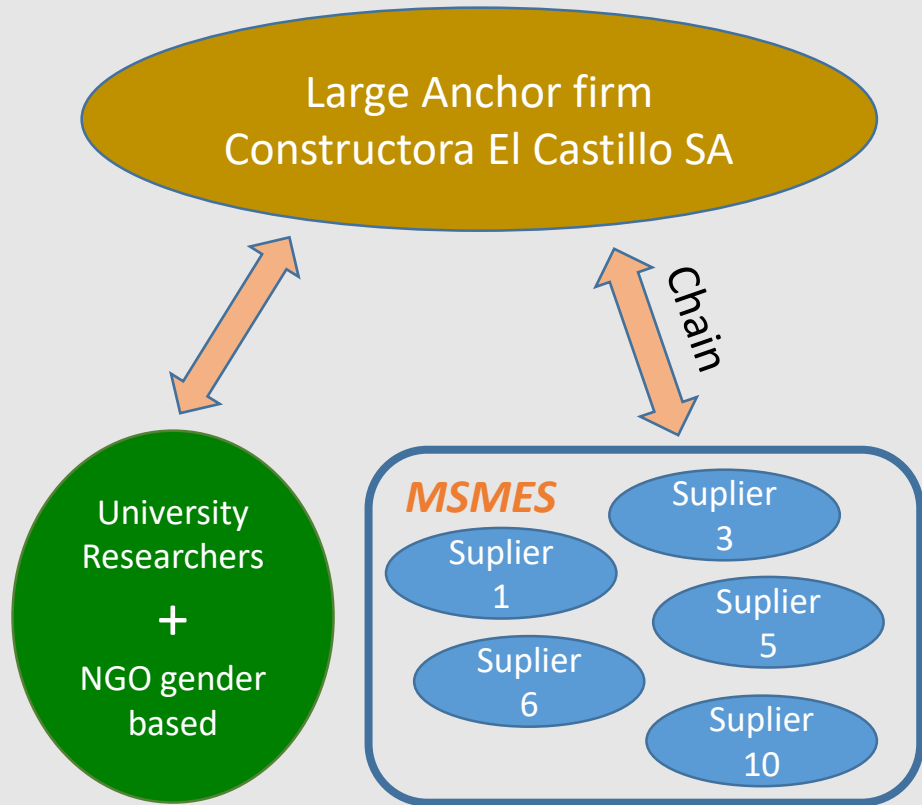
Vasquez 2014 Model: The Crossan *et al.*'s model for the transfer of CP knowledge into MSMEs.

Learning alliances & Strategic partnerships

Academia-Enterprise-SMEs suppliers



Green supply learning network strategy:



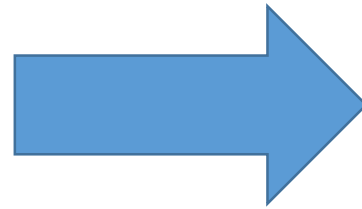
Certificate Program oriented to suppliers:

“learning by doing” and “learning by interacting” methods.



Out of school classes, On-site learning.
CP & OL approach

INTEGRATING specific CP actions



Reuse of the waste water
from the brick cutter, in the
same brick cutting process.

First steps towards the CP change



INTEGRATING specific CP actions



Replacement of wood forms with durable metal forms.

INTEGRATING specific CP actions



Recycling program (Castipesos \$\$\$)



Use of photovoltaic energy for lighting common areas



Use of rain water for concrete preparation and cleaning purposes

INSTITUTIONALIZATION of CP in the firms

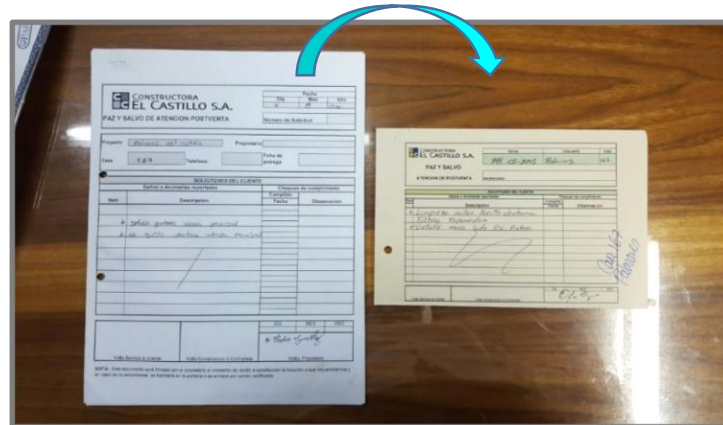
New GREEN POLICIES for taking CP at the heart of the firms



Use of bicycles instead of cars in the areas.

50% in reduction of paper use

Vision: Zero paper policy in specific activities.



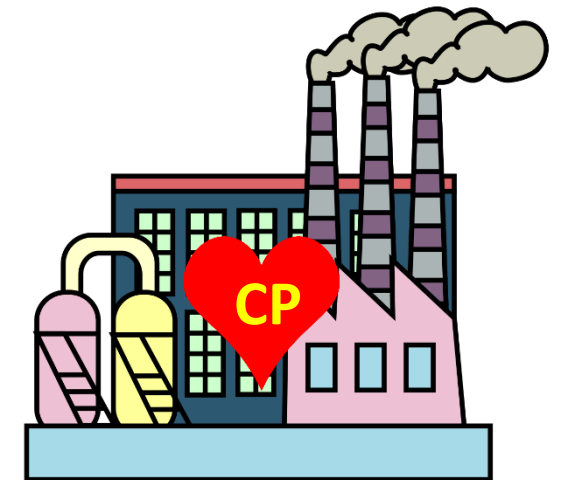
Participatory approach & continuous improvement



Monday, Day to create new environmental ideas !!



Wednesday, no car day !!

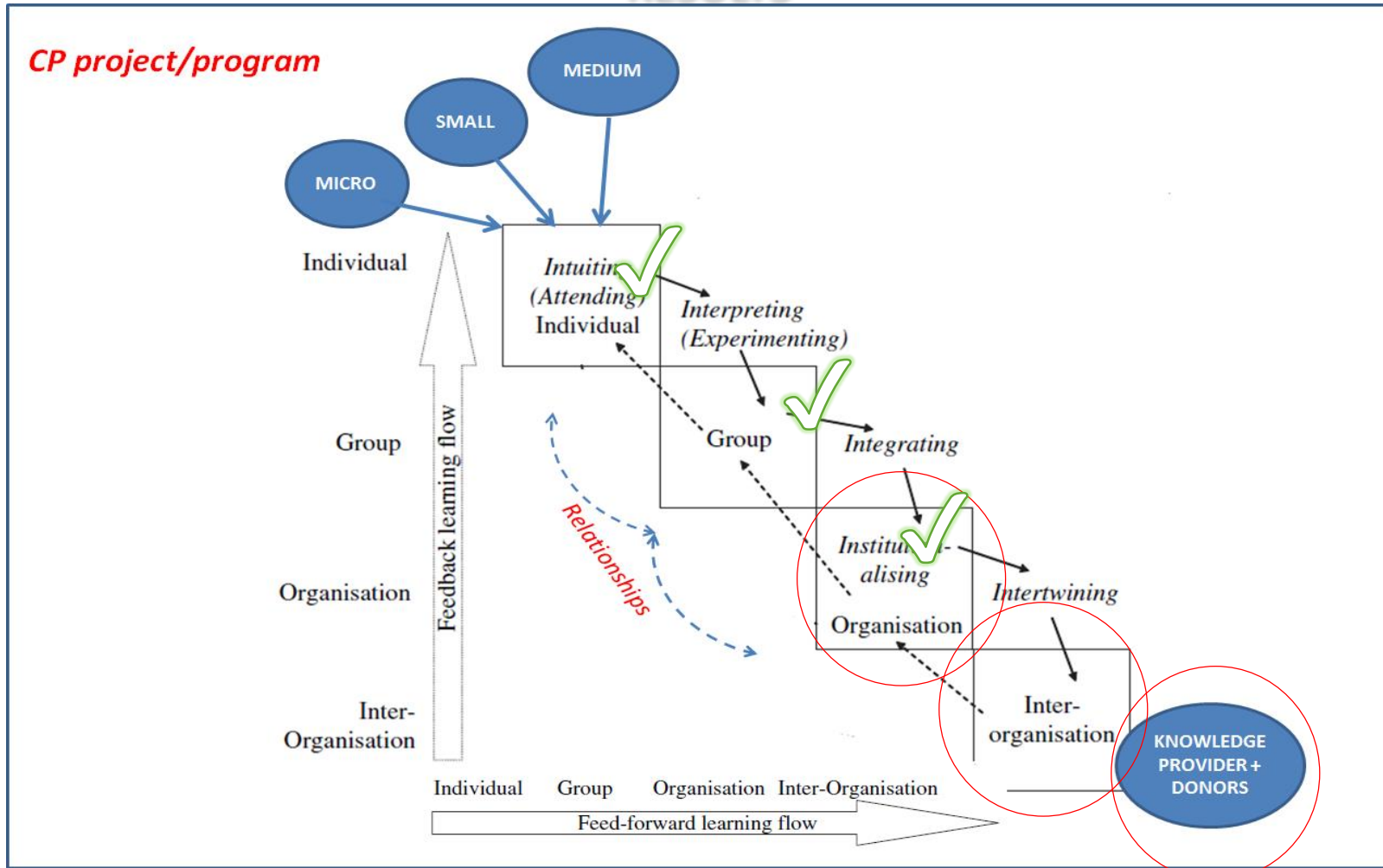




Indicator	Unit	Before applying CP	After applying CP	Total	%
Reduced paper consumption	Sheets of paper reduction / month	8459	4198	4261 (total reduction)	50% (reduction)
Construction waste generation	M3 / two construction complex	1953	1347	606 (total reduction)	31% (reduction)
Reuse of demolition & construction material waste	kg of recovered demolition & construction material	0 out of 1953 m3 of wastes.	1347	1347 m3 out of 1953 m3 of wastes are being reused in roads. (as the wastes are cleaner after taking out the recycling material, they can be now used for roads improvements)	69% (cleaner wastes used for roads)
Replacement of wood forms in all the construction processes.	Number of wooden planks (3 meters long) / month	600	100	500 (total reduction) In specific parts of the beams like the edges, there is still need to use Wood in a limited amount	83%



RESULTS



Viva el Verde

CLEANER PRODUCTION GUIDELINES – CONSTRUCTION No1

*Towards more sustainable & inclusive construction
projects*

Knowledge
externalization!!

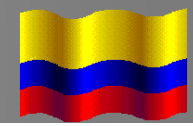


MOMENTUM FOR CHANGE AWARD

Fighting climate change winner activity



THANK YOU - GRACIAS



The institutionalization of CP in the construction chain is possible with OMs leadership and commitment, wider transfer approaches based on OL, and why not with women CP learning alliances !!

THANK YOU !!!