



CLUSTER PROGRAM
MINERA ESCONDIDA

World-class suppliers to the Mining Industry

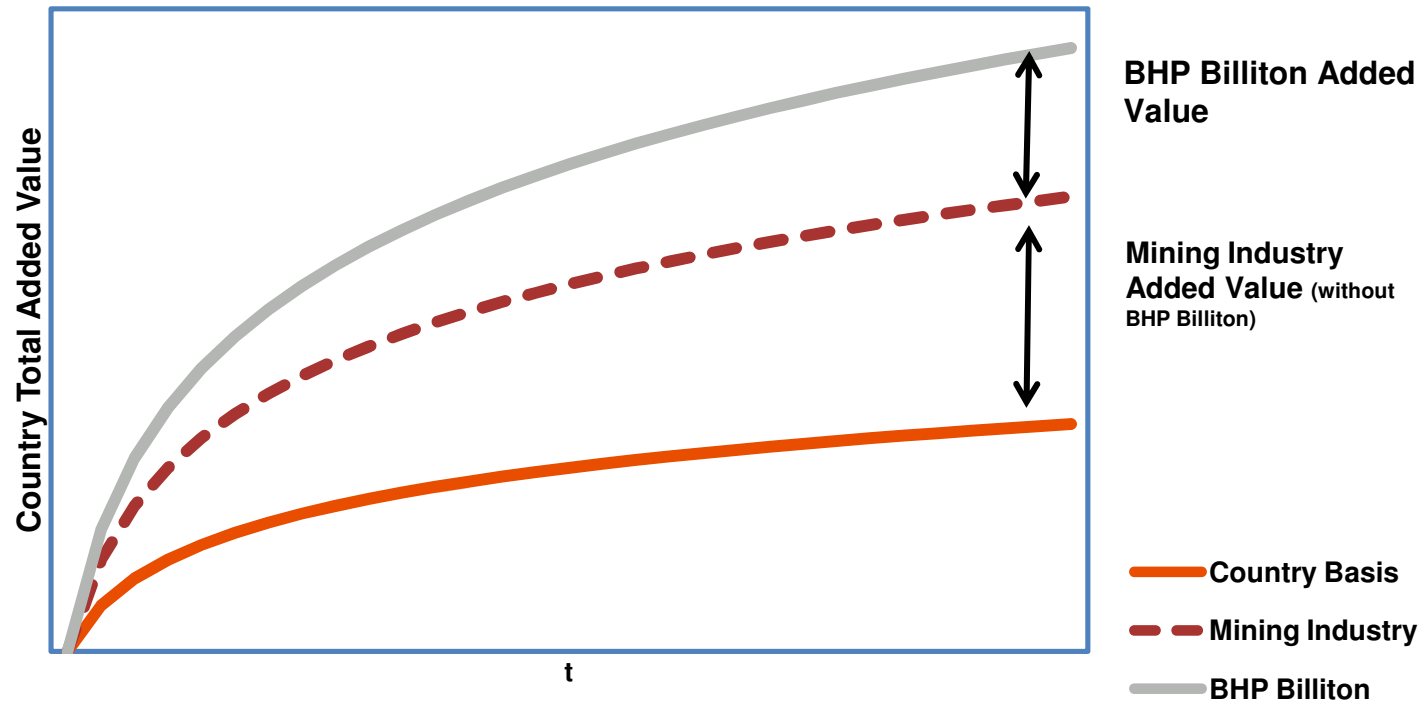
Supporting the development of a knowledge-based mining cluster

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Community and External Affairs Manager
June 29, 2011



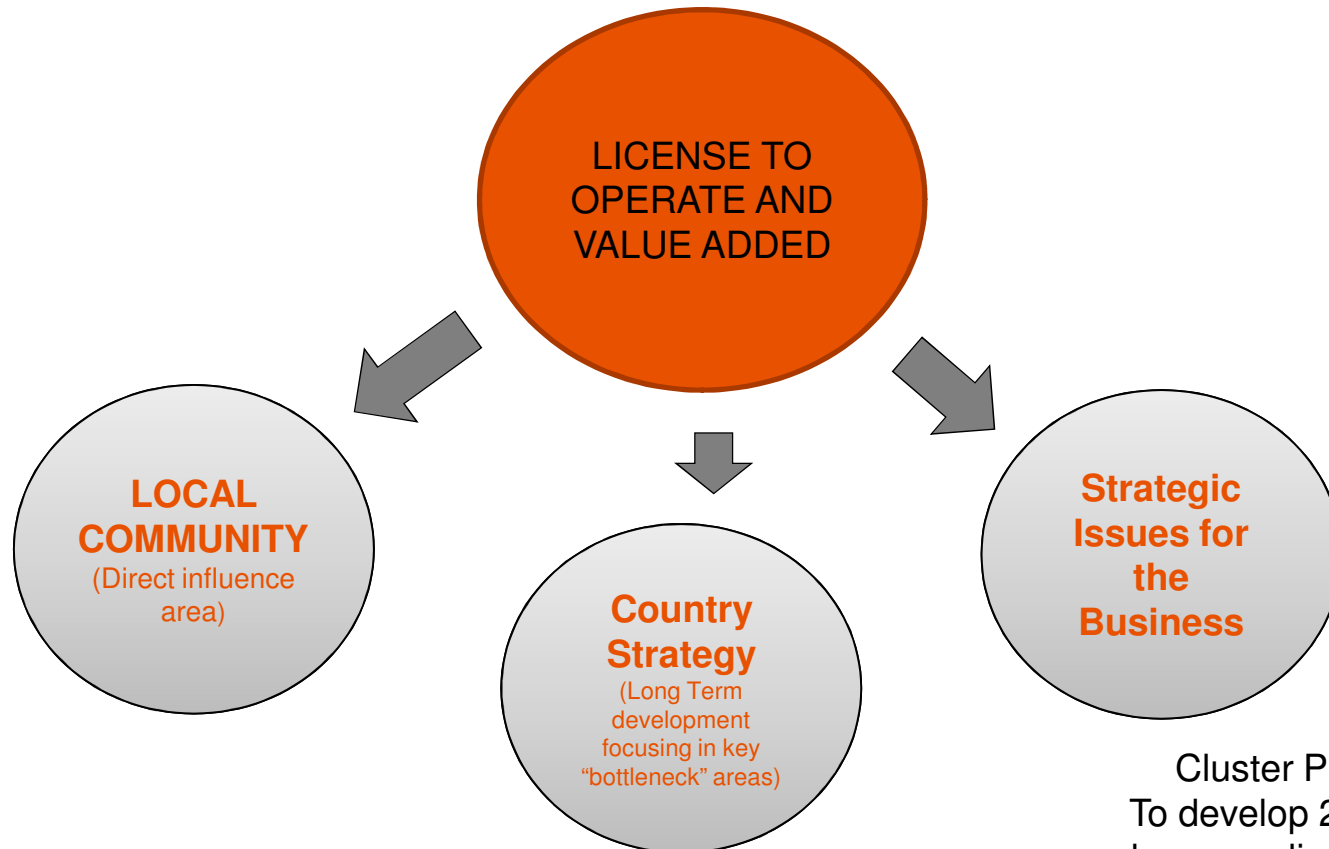
bhpbilliton
resourcing the future

What difference do we make?



We contribute with the sustainable development of the communities and country where we operate, aiming at **being a business that creates a positive legacy.**

To add value, we focus on three areas

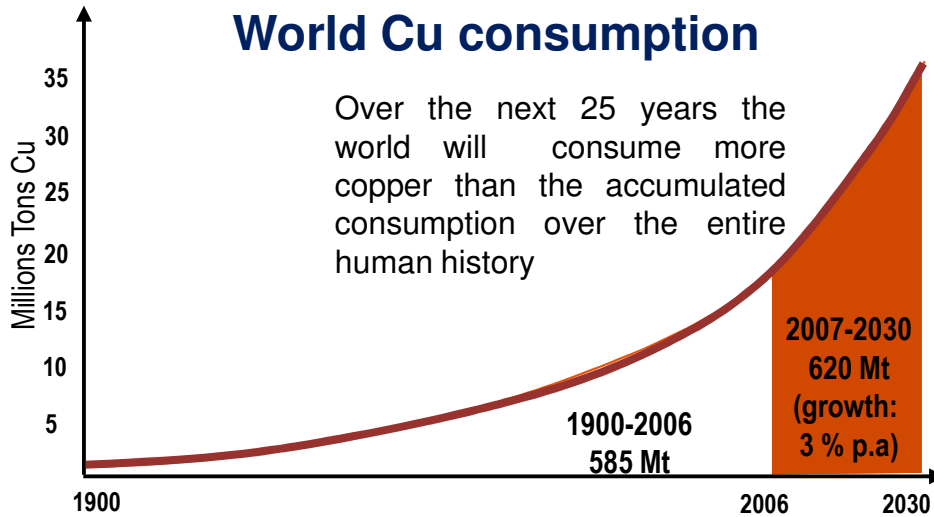


Cluster Program
To develop 250 world-class suppliers by 2020.
(Building higher level of technological and organizational capabilities)

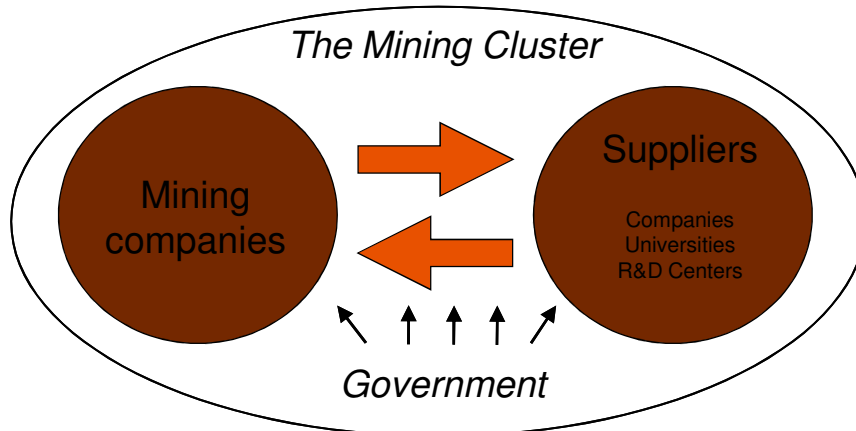
Mining driven development and MNCs' role


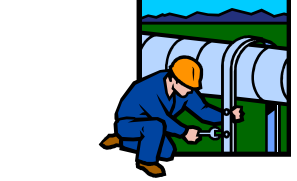




- It is widely accepted that technological capabilities play a key role in underpinning long-term and sustainable development.
- Building capabilities of a higher level is an unavoidable requirement to sustain any development trajectory.
- Developing mining economies require a link between on-going mineral production / growth and that of accumulating new and higher organisational and technological capabilities. Otherwise, mining may become a productive enclave.
- MNCs can make the difference by leveraging and accelerating the building of local capabilities – in particular within suppliers – linking them with requirements of MNCs within international networks.
- The Cluster Program at BM has defined a strategy and a systematic process to put these concepts in practice.

The driver behind suppliers development (KIMS&T)



The required increase of production capacity to meet world's copper consumption growth, demands a much higher performance level at every function in a mining. Knowledge-based suppliers are a key source to enhance performance and play a key to keep mining industry competitive

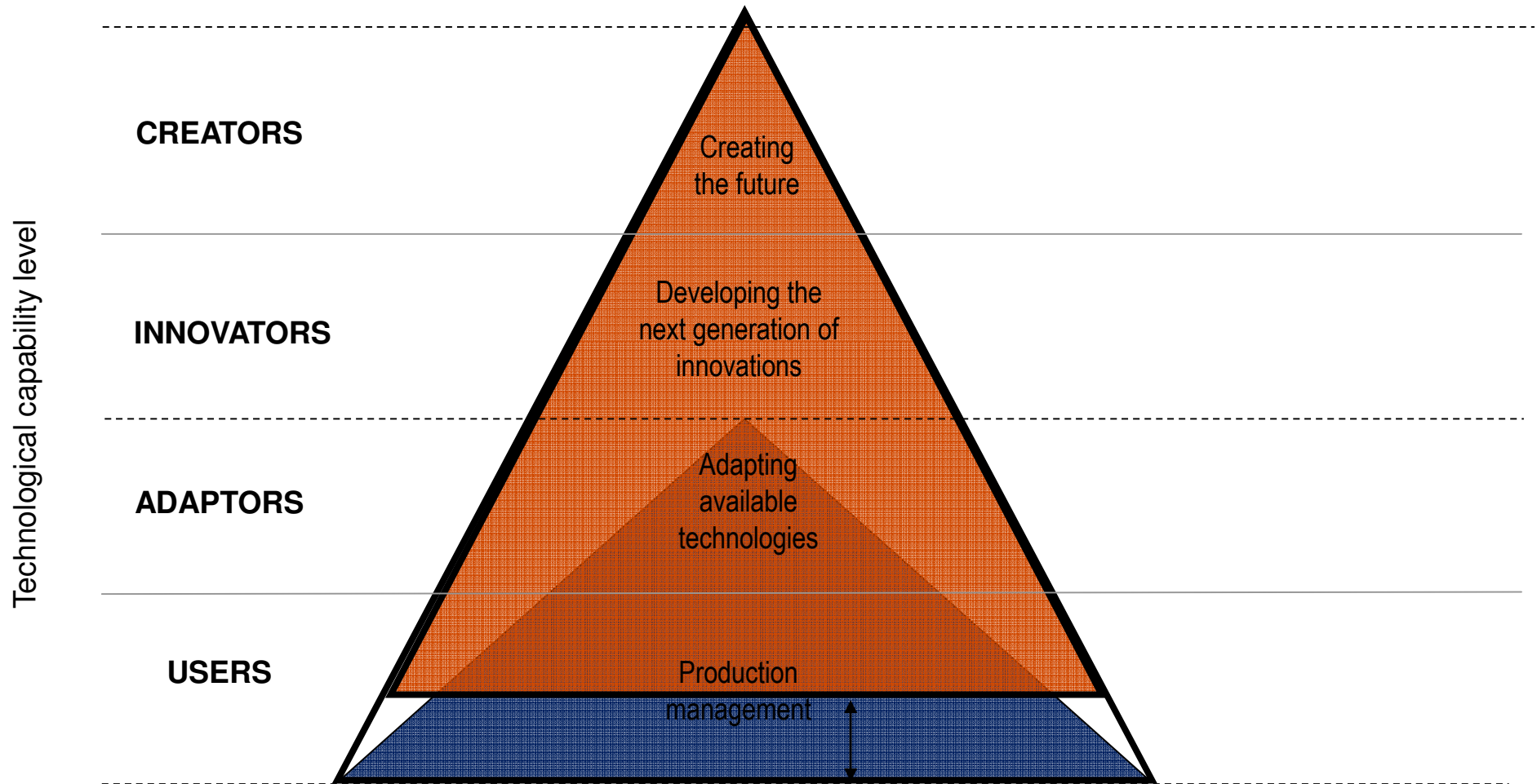


<p>Project people</p> 	<p>Infrastructure</p> 	<p>Power</p> 
<p>Qualified operators</p> 	<p>Equipment</p> 	<p>Water</p> 

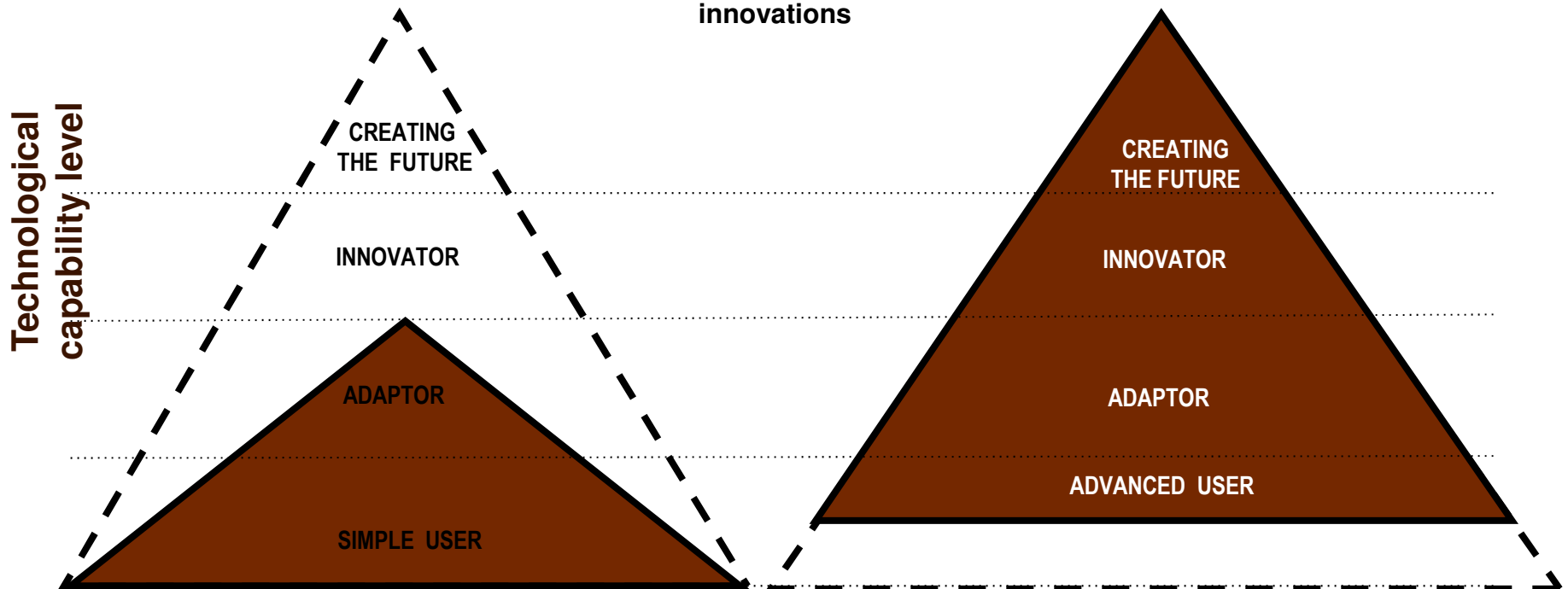
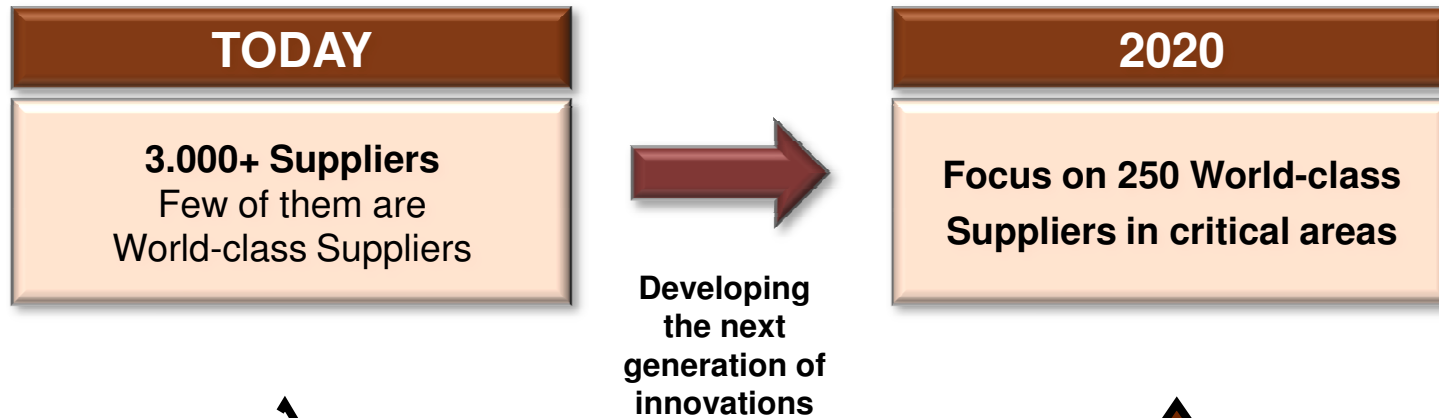
Source:

- World Metal Statistics, March 2010 and Yearbook 2008 – World Production.
- Comisión Chilena del Cobre – Chile Production
- Minería Chilena, Anuario 2010 – MEL + PN Production

Building higher level of capabilities



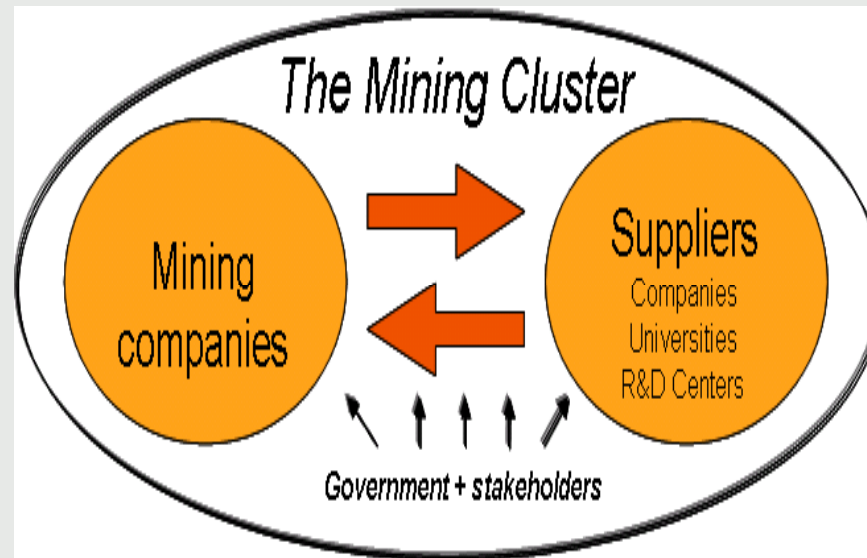
The cluster program goal



Project-based development strategy

Cluster-Projects Portfolio

**Creating value
for the mining
companies**



**Building higher
level of
capabilities for
the suppliers**

INCUBATING AND SUPPORT SYSTEMS

Cluster-project example



Value to mining company

Increase by 20% water recovery before tailing dam, reducing the water content in tailings from 0.65 to 0,52 m³/T

- Escondida deposits its tailing in Laguna Seca dam, which uses an area of 50 km².
- The tailing dam retains process water that if recovered could reduce Escondida's requirement for fresh water (avoiding desalination; avoiding having to use underground water sources)

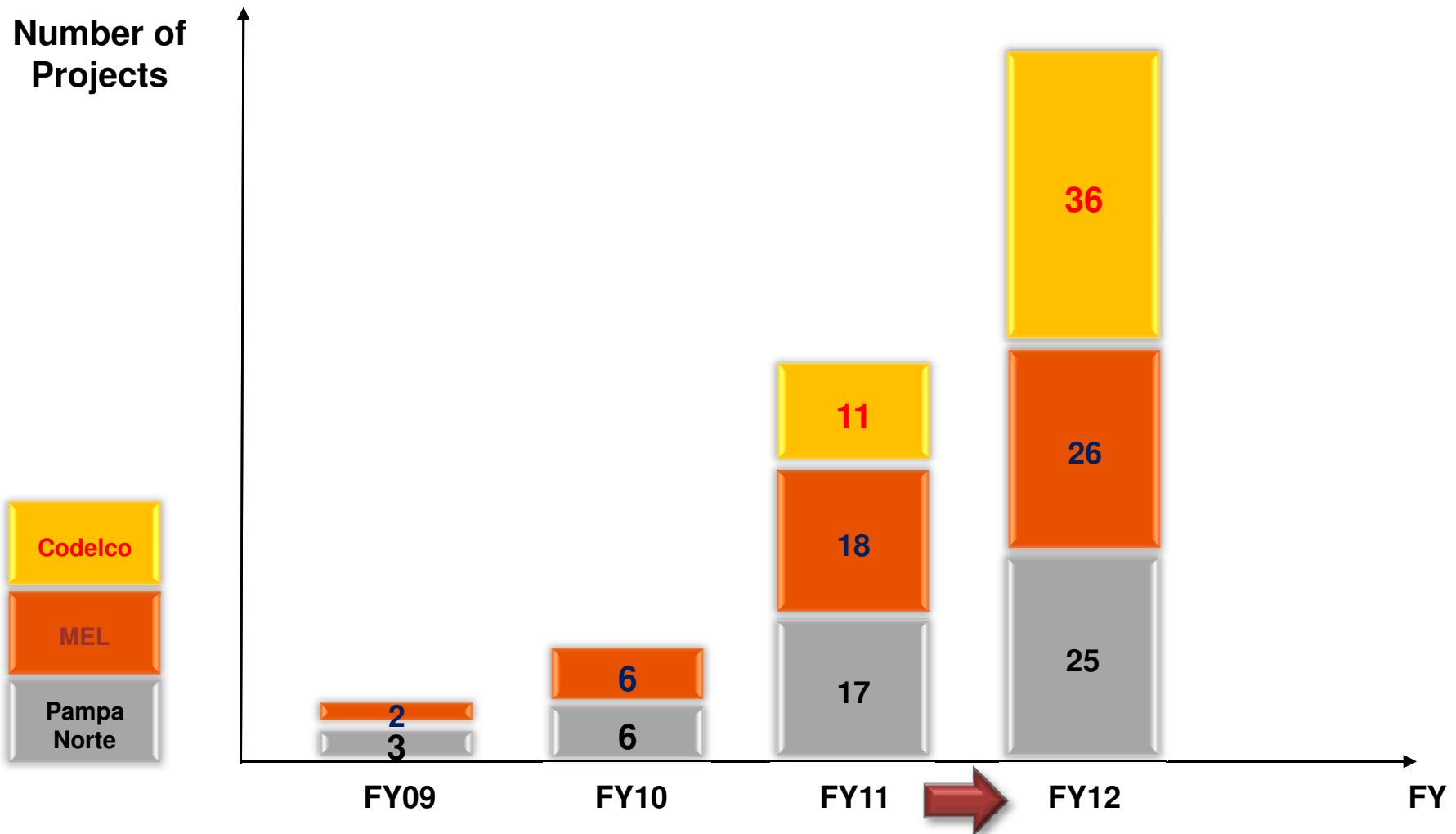


New capabilities at the supplier

At the present nobody is offering this level of recovery

- The engineering consultant might become a world reference in technologies related to water content in tailings as well as in tailing dam design and management, exporting their services worldwide.
- The service offered is knowledge intensive (cutting-edge engineering is required).

Projects evolution – MEL & PN





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