Holcim Lebanon S.A.L., Lebanon – Economic benefits of standards
July 2011 – March 2012
Content of this presentation

- Holcim Lebanon S.A.L. (HL) – Basic company information
- Cement production & HL’s value chain
- Use of standards at HL
- Quantification of the impacts of standards
- Additional qualitative considerations

Case study: Holcim Lebanon S.A.L., Lebanon
Holcim Lebanon S.A.L. – Company overview (1)

- Incorporated in Lebanon in 1929 as a subsidiary of Switzerland-based HOLCIM Ltd., one of the largest cement producers in the world, HL is the largest cement company in the country.

- The company produces grey and white cement and other related concrete construction products.

- Certified ISO 14001 – reducing the impacts of production on the environment is a major consideration of HL and focus is placed on:
  - Water management
  - Treatment of waste water
  - Energy consumption and efficiency

- HL invested USD 4 million, in 2010, in a new filter to reduce emissions and improve the quality of products and the efficiency of the production process.
Holcim Lebanon S.A.L. – Company overview (1)

- The company is also certified to ISO 9001 for quality management and to a technical standard NL 53:1999 which defines the composition of cement and has been mandatory in Lebanon since 2003

<table>
<thead>
<tr>
<th>Some figures</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>1 main production plant plus 1 white cement production plant 4 concrete production plants 1 grinding station in Cyprus</td>
</tr>
<tr>
<td>Annual production</td>
<td>2.5 million tons</td>
</tr>
<tr>
<td>Market share</td>
<td>Estimated at 45% of the cement industry in Lebanon</td>
</tr>
<tr>
<td>Distribution</td>
<td>Throughout Lebanon and limited exports to neighbouring countries</td>
</tr>
<tr>
<td>Main source of revenue</td>
<td>Grey cement represented 84% in 2009</td>
</tr>
<tr>
<td>Profit margin</td>
<td>Maintained between 31% and 33% over recent years despite fluctuations in oil prices and energy costs</td>
</tr>
</tbody>
</table>
Cement production – Industry value chain

Case study: Holcim Lebanon S.A.L., Lebanon
Main stages in cement production

From *procurement* of inputs, through *production*, to *distribution*
Model of a company value chain (M. Porter)

The “value chain” is used as a tool in the assessments to structure and analyze the activities of companies.

Case study: Holcim Lebanon S.A.L., Lebanon
Key value drivers at Holcim Lebanon S.A.L.

- Based on interviews with HL staff, the following aspects have been identified as key value drivers:
  - Know-how leadership
  - Reputation and image
  - Supplier and customer relationship
  - Production capability
Attitude of Holcim Lebanon towards standards

- Having extensive experience in standardization, HL considers participation in standards committees highly valuable for ensuring a competitive edge and for applying up-to-date standards in its operations.
- In addition to national and international technical and management standards, HL applies an elaborate system of procedures, methods and requirements developed by the Holcim Group and mandatory throughout the various national companies. Examples are the manuals for procurement, design and project management.
- HL also applies ethical and social standards in its operations. This implies sensitivity and responsible management of natural resources throughout the construction life-cycle, including operations and maintenance.
- The company is certified to:
  - ISO 9001:2008 for quality management system
  - ISO 14001:2004 for environmental management system
  - NL 53:1999 technical standard mandatory in Lebanon which defines the composition of different types of cement.
Preliminary analysis of the Standards Impact

Following several rounds of interviews at HL, it was decided to focus the study on the following three business functions:

- Management and administration
- Procurement
- Production
Value chain of Holcim Lebanon – Business functions selected for the assessment of the impacts of standards are highlighted

- A - Management & Administration
- C - Engineering
- D - Procurement
- E - Inbound Logistics
- F - Production / Operations
- G - Outbound Logistics
- H - Marketing & Sales
- I - Service
Management and administration

- Implementation of ISO 14001 has been a key contributor to achieving environmental improvements.
- Total savings owing to reuse of waste fuel between 2007 and 2011 resulted in a total savings of USD 77,831 – around 0.05% of average annual revenue and 0.14% of annual average EBIT for the period.

Procurement

- As no clear trends could be identified, it was not possible to translate changes in the number of suppliers into financial impacts.
Production/Operations

- Implementation of NL 53:1999 allowing different compositions of cement through different clinker factors (higher or lower proportion of clinker) has resulted in lower production costs for cement as well as improved environmental performance (due to a decrease in CO₂ emissions during the production process).

- NL 53 was a key factor in gaining acceptance for the introduction of cement with lower clinker factor into the market in Lebanon. Applying this standard helped Holcim reduce risk and create assurance among customers in Lebanon regarding the performance and reliability of these types of cement.

- Total savings between 2001 and 2006 are estimated at USD 1 030 000 representing approx. 1% of average annual revenue and 2.5% of the average annual EBIT for the period.
## Conclusion: Impact of standards on the company

<table>
<thead>
<tr>
<th>Assessed Business Functions</th>
<th>Annual savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and administration (environment): reuse of waste fuel</td>
<td>USD 77 831</td>
</tr>
<tr>
<td>Production: decrease in clinker factor (estimation)</td>
<td>USD 1 030 808</td>
</tr>
<tr>
<td><strong>Total savings</strong></td>
<td><strong>USD 1 108 639</strong></td>
</tr>
</tbody>
</table>

NOTE – The estimated USD 1 108 639 contribution of standards occurred over the period 2001 to 2011. However, the two factors that caused this impact – reduction in the clinker factor and increased reuse of waste fuel – did not occur in parallel but in sequence, the first between 2001 and 2006, and the second from 2007 to 2011. An overview of HL revenue and EBIT between 2001 and 2010 on the basis of published annual reports for these years can be found in Annex 3 to the full study.

- The contribution of standards as identified in this study is 0.84% of the average annual revenue and 2.3% of the average annual EBIT
Some additional qualitative considerations (1)

- Through stringent requirements concerning the purchase of supplies, it can be assumed that HL makes a positive impact on the performance and quality of its suppliers in the domestic market in Lebanon.

- As an environmentally responsible company and environmental leader, it is likely that HL also influences other companies in the Lebanese cement and construction industry.

- HL’s commitment to social responsibility has an impact on the local community as well as on employee attitudes and, together with its environmental performance and high quality of products, contributes to the high reputation of the company – key factors that support its strong market position.
Thank you
Confidence has a nickname…

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