

Cement and clinker trade flows in Asia

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19 June 2012



General overview

Region includes Indian Ocean and Pacific Ocean islands (excl. Hawaii)

Global cement and clinker trade 163 mt
of which seaborne 130 mt

Regional cement and clinker trade 68 mt
(42% of global trade)

of which seaborne 62 mt
(48% of global seaborne trade)



Cement and clinker trade flows in Asia

Issues with export and import statistics

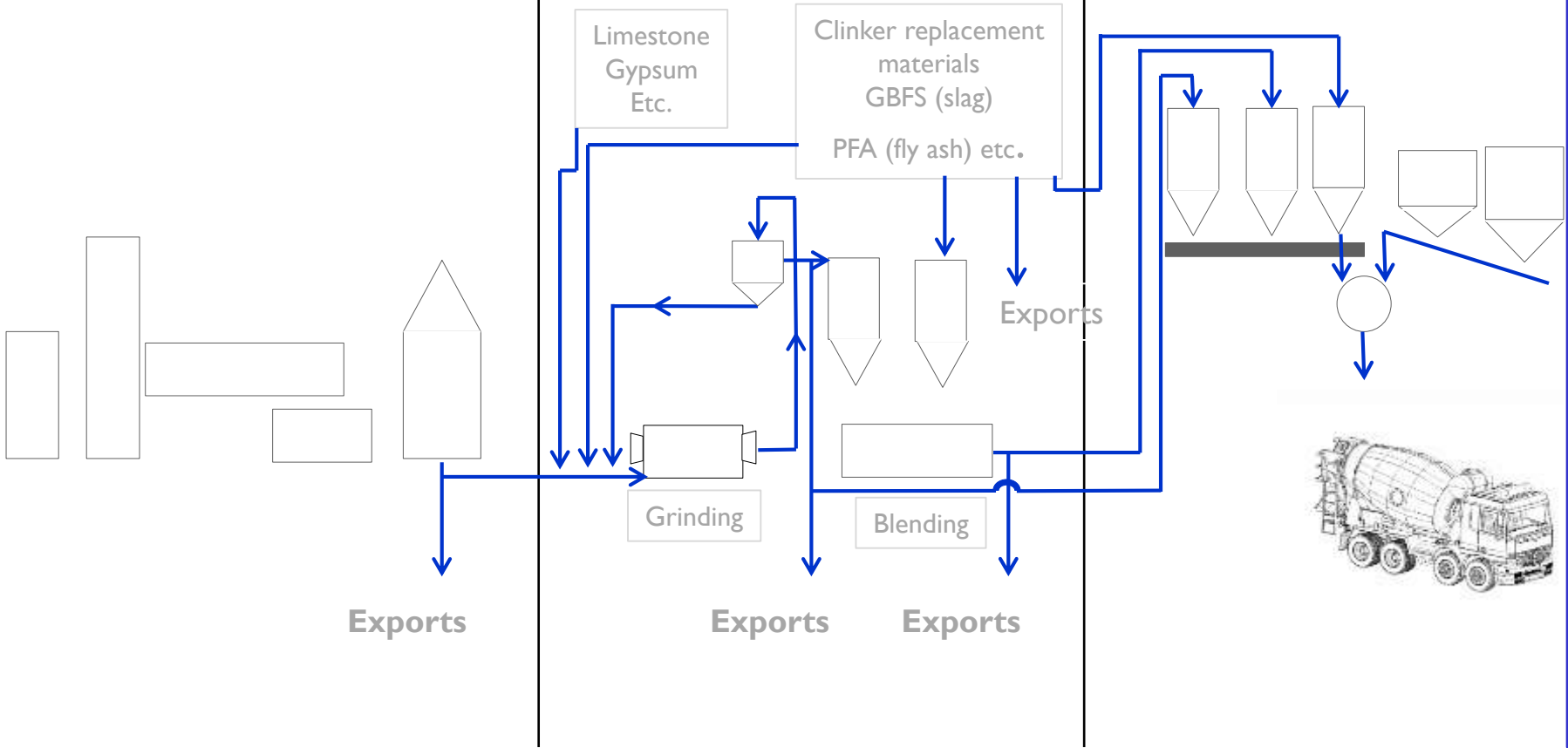
- Often no separation between clinker and cement export figures (and for cement exports no separation between bulk, bags and big bags)
- What is cement? (see next slide) How are PFA, GBFS, etc. covered in statistics?
- Frequently clinker imports are not mentioned in national statistics
- Imports of independents are often not reported in national statistics (as reported by national cement associations)

Total global import figures are about 20% lower than global export figures!!

Clinker production

Binder production

Concrete production

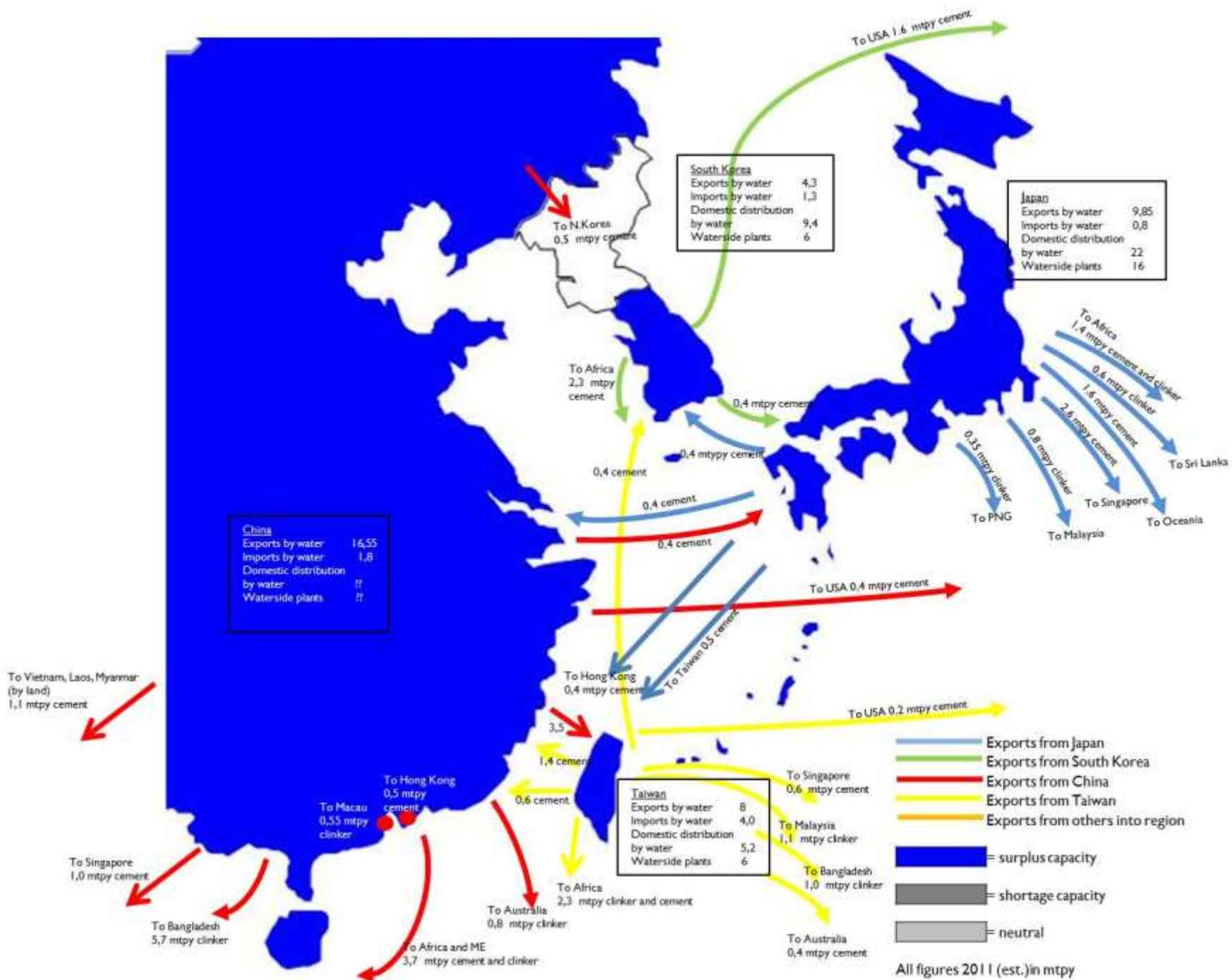


Cement and clinker trade flows in Asia

How to get “proper” trade flow statistics

- Use export figures as a basis
- Use import figures from reliable sources first
- Trace trading networks of cement multinationals
- Find import sources
 - a) coastal grinding plants
 - b) coastal cement terminals
- Combine various information from publications, news, private sources, etc.
- Make “educated guesses” on remaining undefined exports

All statistics provided are Cement Distribution Consultants 2011 estimates



Regional overview

North East Asia

Total exports in area 38,7 mt

of which :

- Imported within the area 9,0 mt
- Exported to Asia – Australia region 17,8 mt
- Global exports 11,9 mt

Domestic distribution

Japan	22 mt
South Korea	9,4 mt
China	?? mt
Hong Kong	2,3 mt
Taiwan	5,2 mt
Total	38,9 mt + China

Total waterborne cement and clinker movements in area 77,6 mt + China

Cement and clinker trade flows in Asia

Country overview



Area with most coastal cement plants

Japan

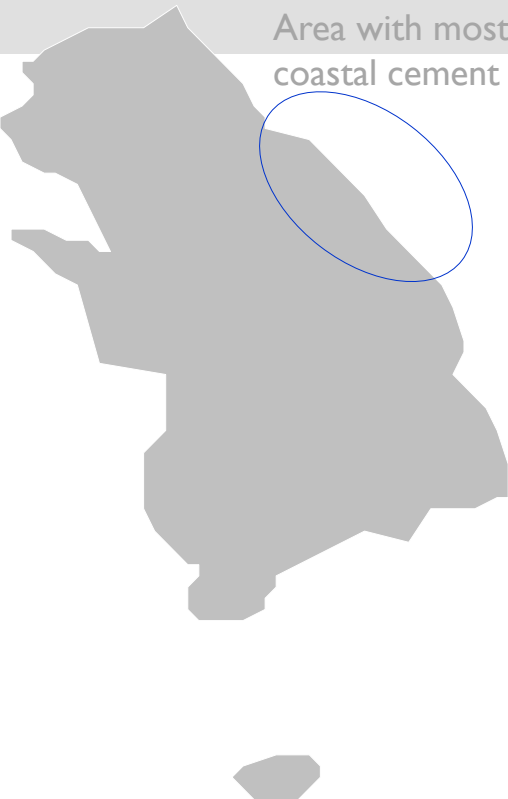
Production	50	mt
Exports	9,85	mt
Domestic distribution	22	mt
by water		
Total	31,85	mt
(64% of production)		
18 Coastal cement plants		
Approx. 220 coastal terminals		
74 Self discharging vessels		

Cement and clinker trade flows in Asia

All figures 2011

Country overview

Area with most
coastal cement plants



South Korea

Production	50 mt
Exports by water	4,3 mt
Domestic distribution by water	9,4 mt
Total waterborne (27 % of production)	13,7 mt
6 Coastal cement plants	
Approx. 18 coastal terminals	
34 Self discharging vessels	

Cement and clinker trade flows in Asia



Country overview

Most exports from Yellow River and Pearl River basins



China

Production	2040 mt
Exports by water	16,6 mt
Domestic distribution	????
(10% means 200 mt!!)	

by water

??? Coastal cement plants

??? Coastal terminals

10 Self discharging vessels



Cement and clinker trade flows in Asia

Country overview



Area with most coastal cement plants

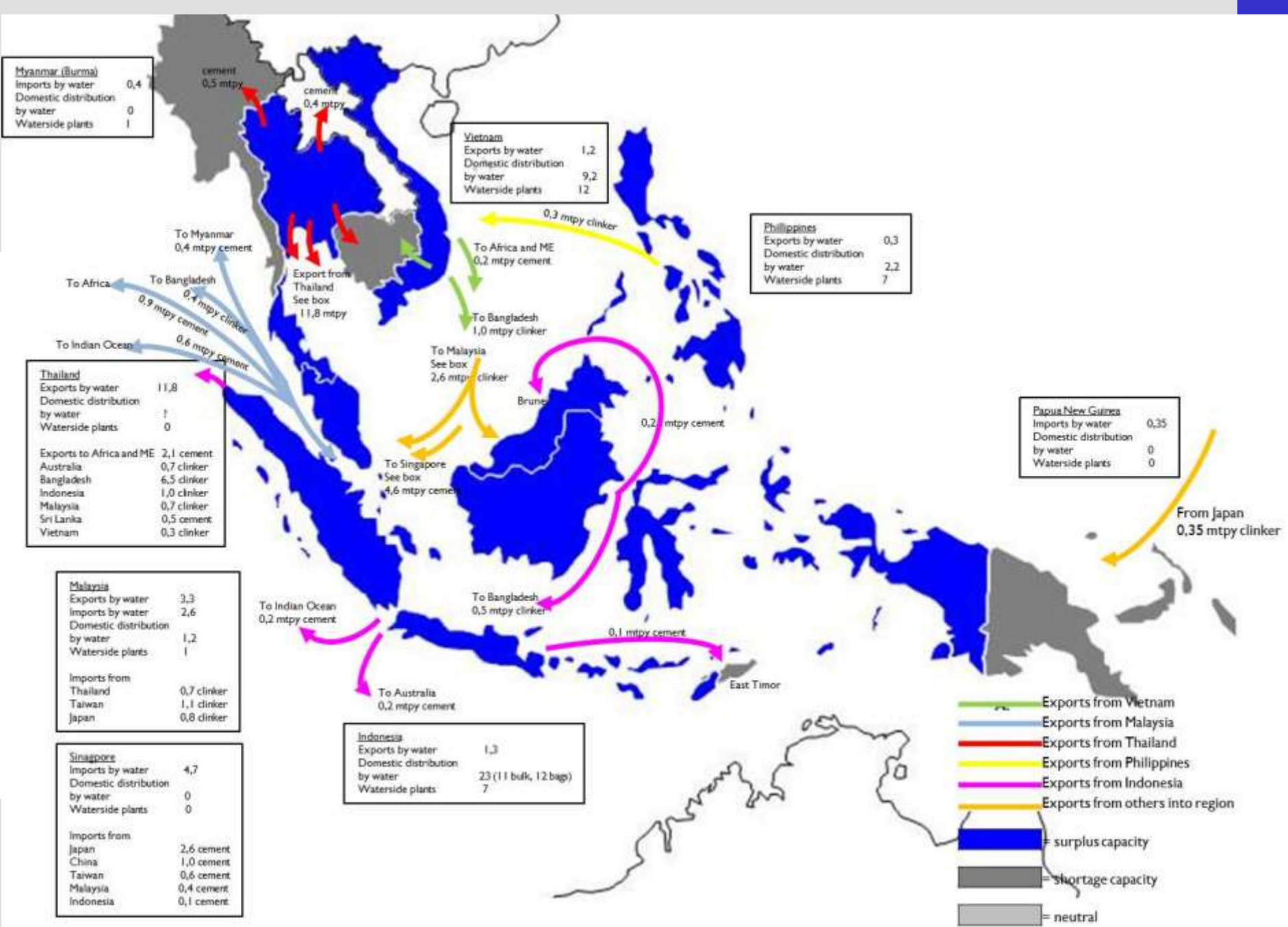


Taiwan

Production	18,5 mt
Exports by water	8 mt
Domestic distribution by water	5,2 mt
Total waterborne (71 % of production)	13,2 mt
5 Coastal cement plants	
Approx. 16 coastal terminals	
15 Self discharging vessels	

Cement and clinker trade flows in Asia

All figures 2011



All figures 2011 (est.)

Regional overview

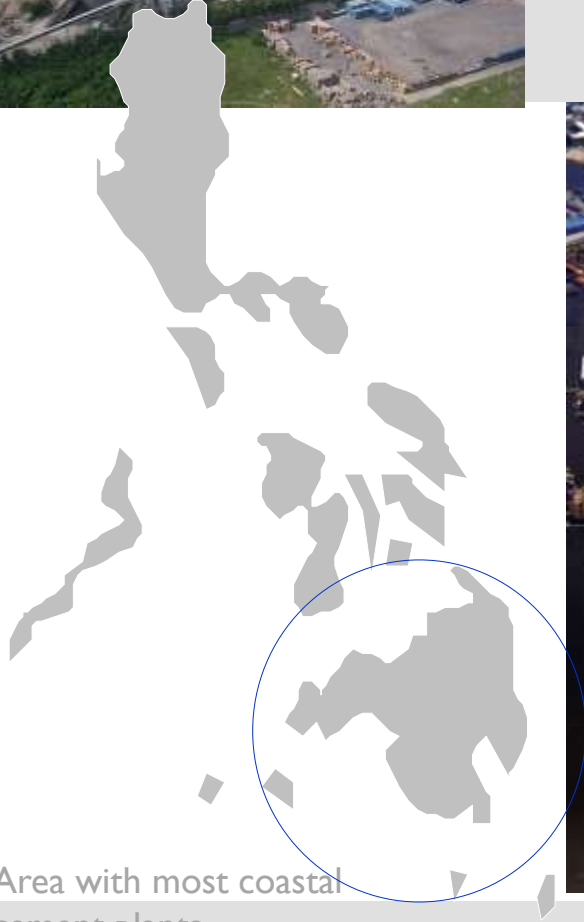
South East Asia

Total exports in area	18,1 mt
Total imports	
• From within the area	4,3 mt
• From within the Asia – Australia region	7,1 mt
Total exports outside the area	
• To the Asia – Australia region	10,6 mt
• Global exports	3,2mt
Domestic distribution by water	
Philippines	2,2 mt
Vietnam	9,2 mt
Malaysia	0,6 mt
Thailand	0 mt
Indonesia	11 mt
Total	23 mt

Cement and clinker trade flows in Asia



Country overview



Phillippines

Production	16,6 mt
Exports by sea	0,3 mt
Domestic distribution by sea	2,2 mt
Total waterborne (15% of production)	2,5 mt
7 Coastal cement plants	
Approx. 7 coastal terminals	
4 Self discharging vessels	

Area with most coastal
cement plants

Cement and clinker trade flows in Asia

Country overview



Area with most coastal cement plants



Clinker grinding plants and terminals



Vietnam

Production	57 mt
Exports by water	1,2 mt
Domestic distribution by water	9,2 mt
Total waterborne (18% of production)	10,4 mt
12 Coastal cement plants	
Approx. 3 coastal terminals	
7 Self discharging vessels	

Country overview



Area with most coastal cement plants



Area with most coastal grinding plants



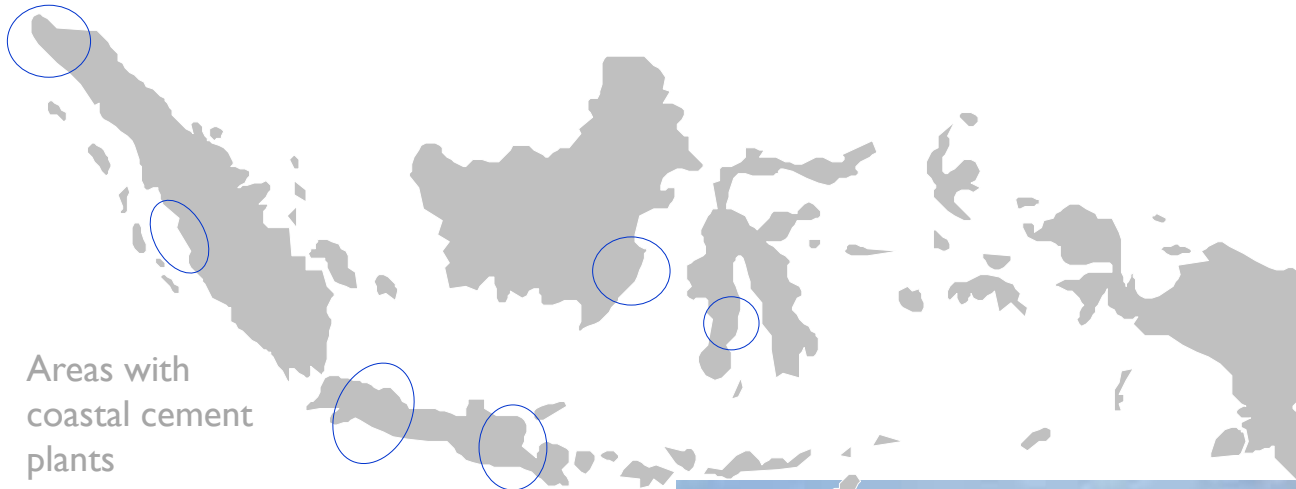
Malaysia

Production	18	mt
Exports by water	3,3	mt
Domestic distribution	1,1	mt
by water		
Total waterborne	4,4	mt
(24 % of production)		
I Coastal cement plant		
Approx. 4 coastal terminals		
II Self discharging vessels		

Cement and clinker trade flows in Asia



Country overview

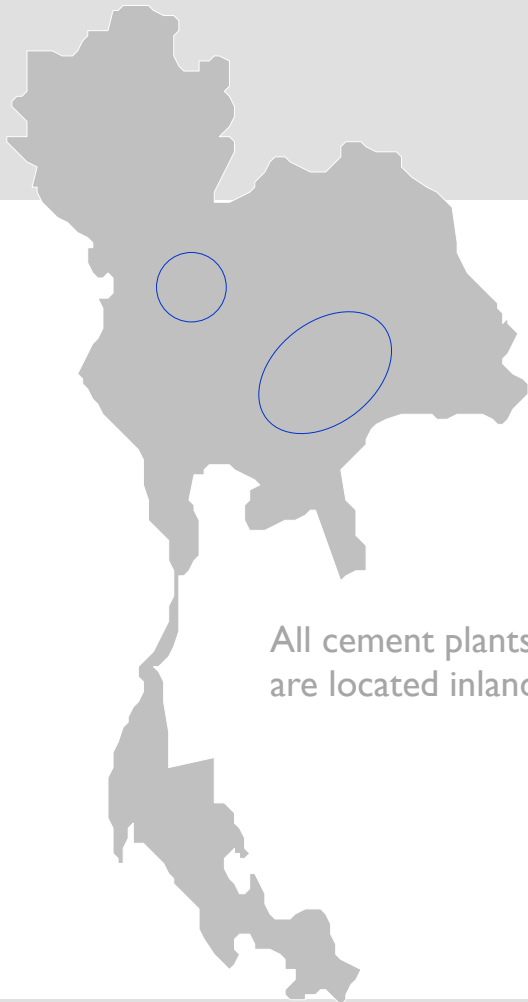


Indonesia

Production	47	mt
Exports by water	1,3	mt
Domestic distribution	11	mt
by water		
Total waterborne	12,3	mt
(27 % of production)		
7 Coastal cement plants		
Approx. 34 coastal terminals		
42 Self discharging vessels		

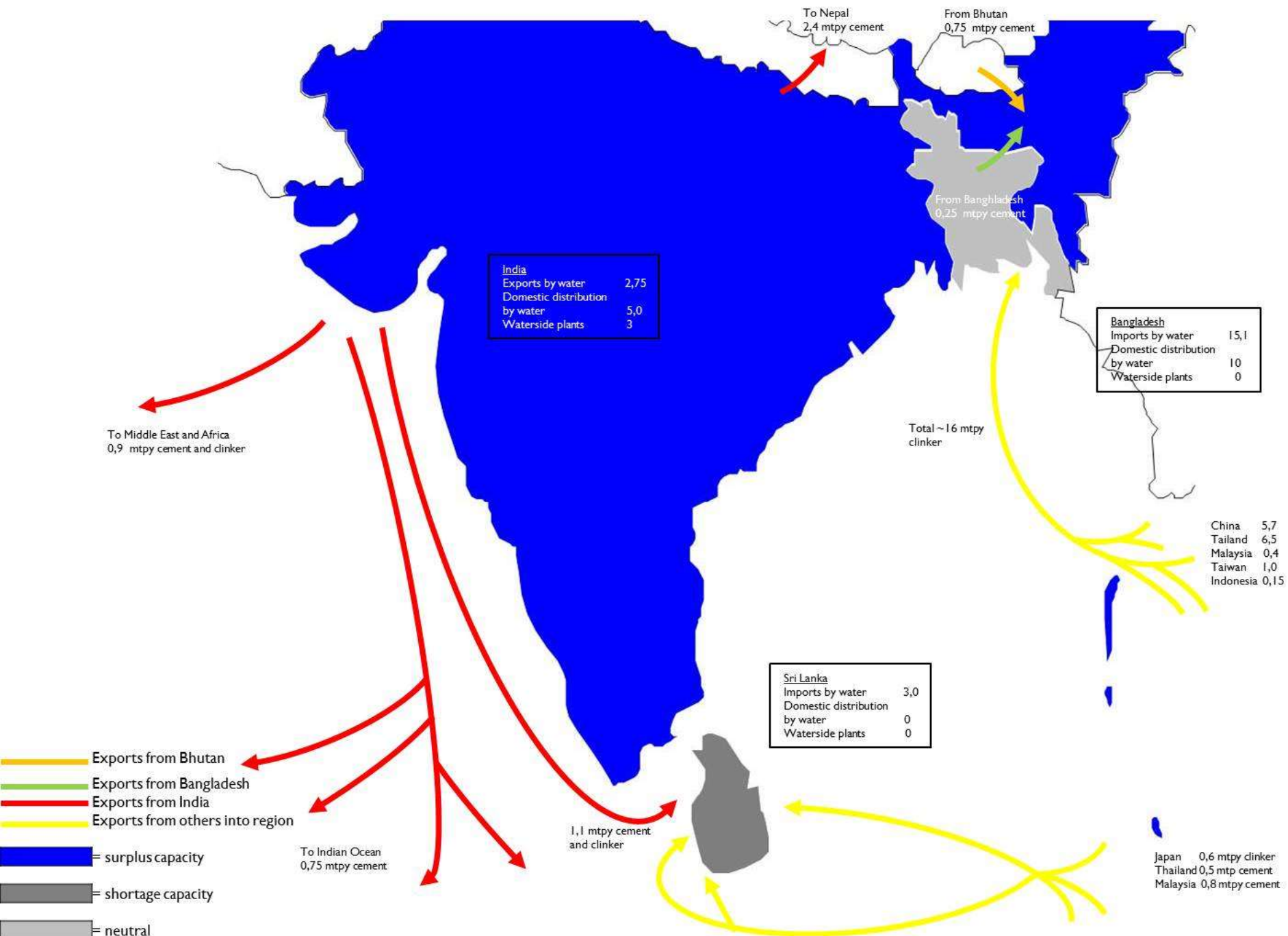


Country overview



Thailand

Production	39	mt
Exports by water	11,8	mt
Domestic distribution by water	0	mt
Total waterborne (30% of production)	11,8	mt
0 Coastal cement plants		
Approx. 0 coastal terminals		
0 Self discharging vessels		



All figures 2011 (est.) in mtpy

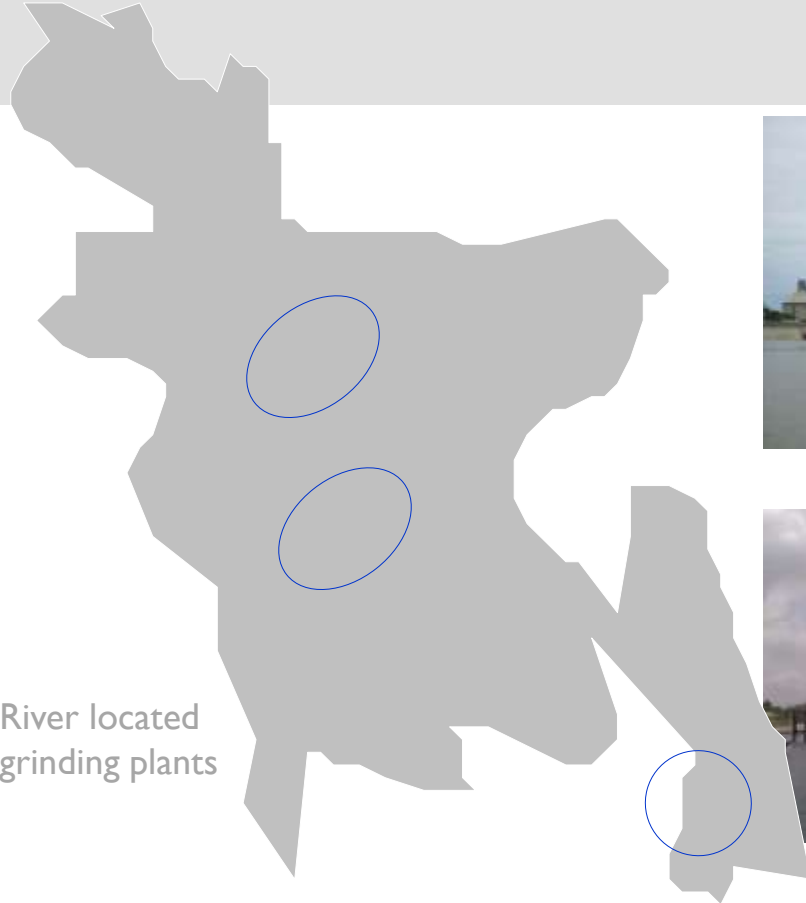
Regional overview

South Asia

Total exports in area	2,75 mt
Total imports	
• From within the area	1,85 .mt
• From within the Asia – Australia region	18 mt
Total exports outside the area	
• To the Asia – Australia region	0 mt
• Global exports	0,9 mt
Domestic distribution by water:	
Bangladesh	10 mt
India	5 mt
Sri Lanka	0,5 mt
Total	15,5 mt

Cement and clinker trade flows in Asia

Country overview



River located grinding plants



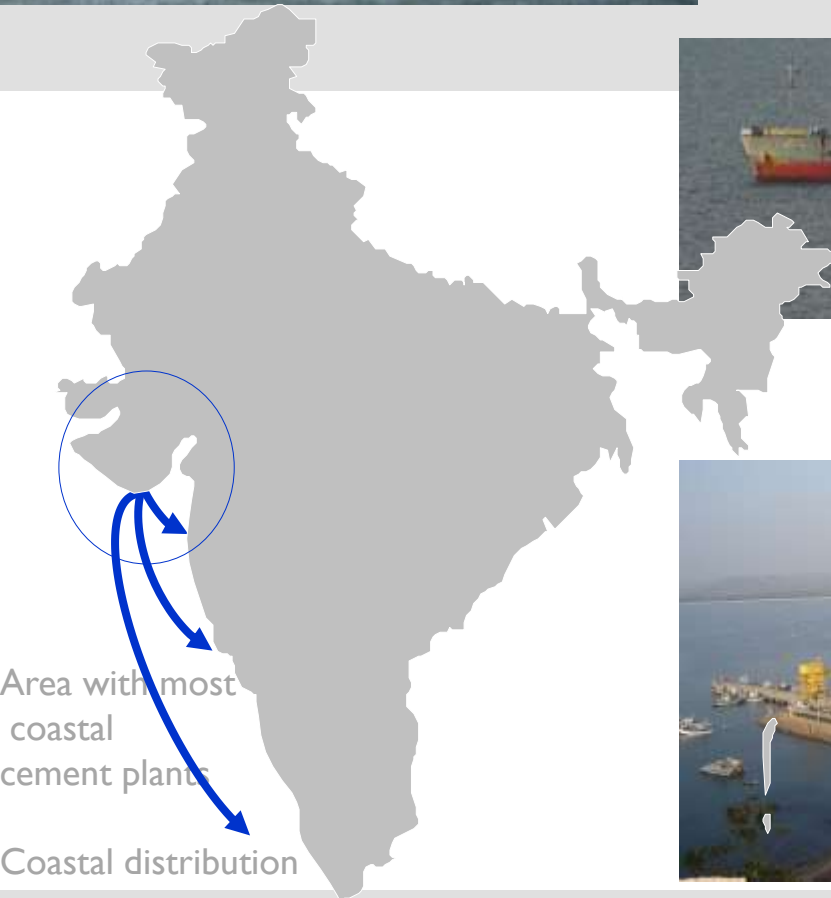
Bangladesh

Production	14,9 mt
Exports by water	0 mt
Domestic distribution by water	10 mt
Total waterborne (67% of production)	10 mt
0 Coastal cement plants	
Approx. 0 coastal terminals	
0 Self discharging vessels	

Cement and clinker trade flows in Asia



Country overview



India

Production	237	mt
Exports by water	2,8	mt
Domestic distribution by water	5	mt
Total waterborne (3% of production)	7,8	mt
4 Coastal cement plants		
Approx. 7 coastal terminals		
14 Self discharging vessels		

Cement and clinker trade flows in Asia

Country overview



Grinding plant

Import terminals

Grinding plant

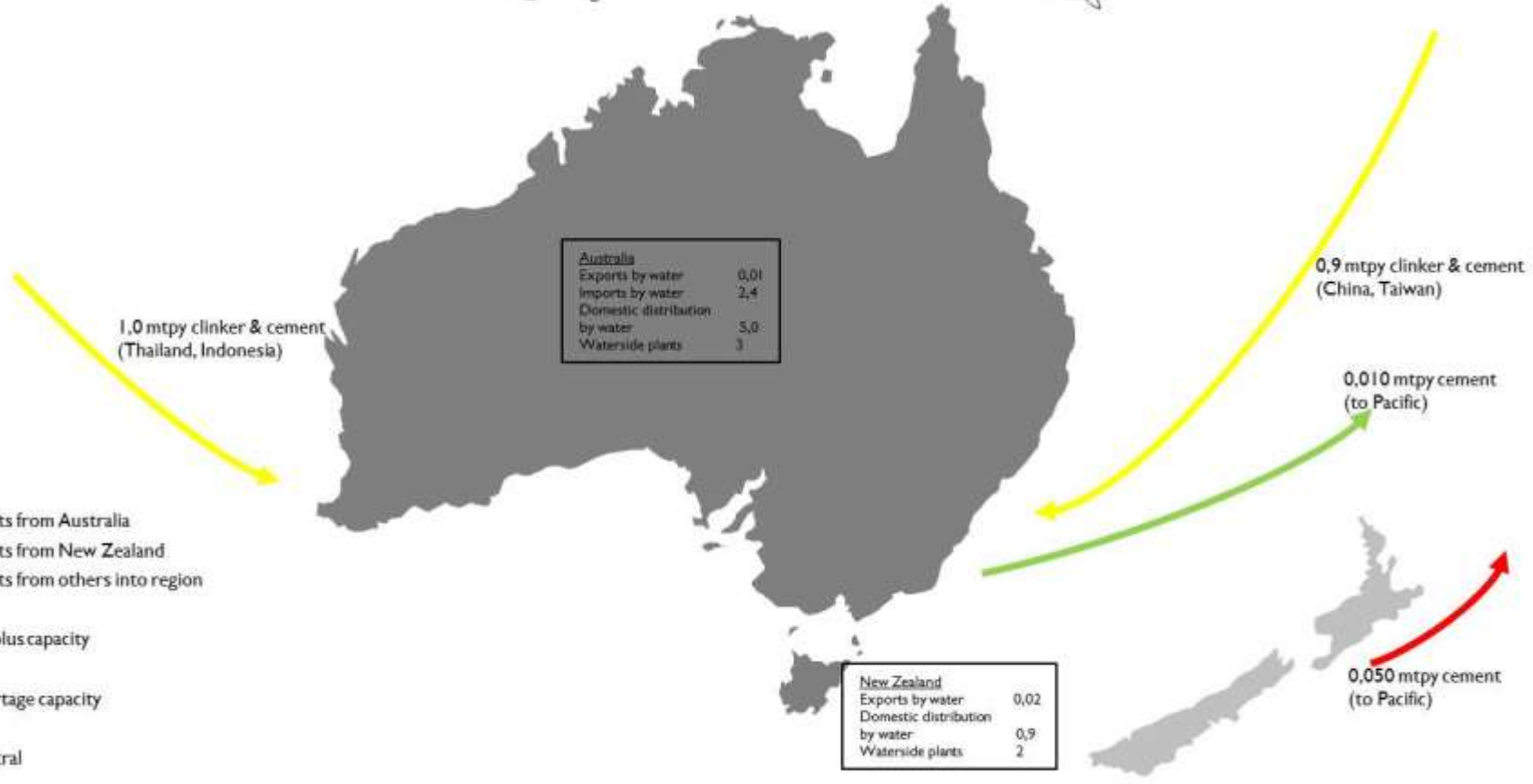
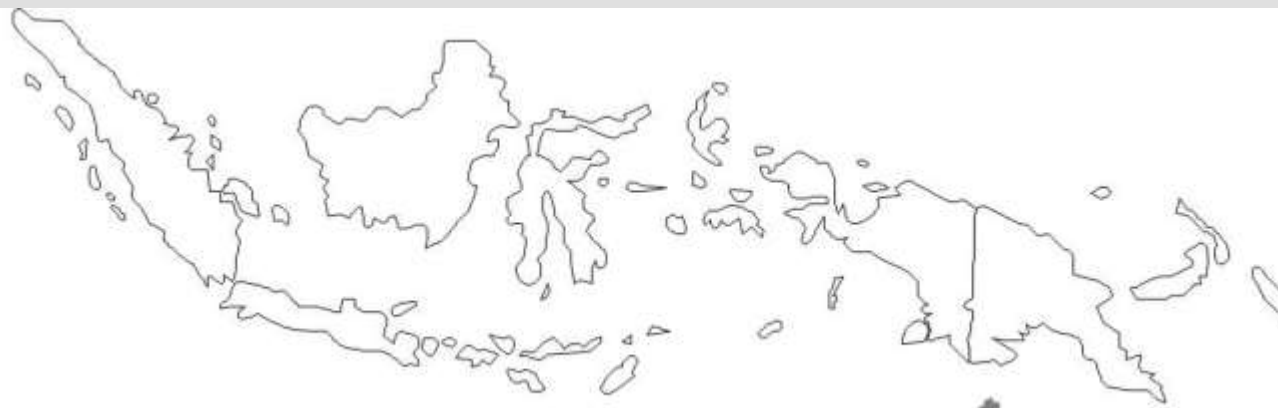
Future grinding plant



Sri Lanka

Production	1,9 mt
Exports by water	0 mt
Domestic distribution	0,5 mt
by water	
Total waterborne	0,5 mt
(0% of production)	
0 Coastal cement plants	
Approx. 4 coastal terminals	
6 Self discharging vessels	

Cement and clinker trade flows in Asia



All figures 2011 (est.)



Country overview



Australia

Production	10,5	mt
Exports by water	0,01	mt
Domestic distribution	5	mt
	by water	
Total waterborne	5	mt
	(48% of production)	
3 Coastal cement plants		
Approx. 5 coastal terminals		
9 Self discharging vessels		



Cement and clinker trade flows in Asia



Country overview



New Zealand

Production	1,4	mt
Exports by water	0,02	mt
Domestic distribution	0,9	mt
by water		
Total waterborne	0,9	mt
(64% of production)		
2 Coastal cement plants		
Approx. 10 coastal terminals		
2 Self discharging vessels		

Cement and clinker trade flows in Asia

Summary

Waterborne cement and clinker exports from region	62 mt
Waterborne domestic distribution in region	83 mt (plus China)
Total waterborne transportation in the region	145 mt
of which by bulk carrier	56 mt
of which by self discharging ship	89 mt

228 Self discharging ships are active in the region. This is 72% of the global fleet of 317 vessels (> 2.000 DWT)

Cement and clinker trade flows in Asia

To be published December 2012

Global Cement Trade & Distribution Handbook

- Economical mechanisms of cement and clinker trade and distribution
- Overview of global and regional trade flows
- Overview of domestic distribution systems
- Directory of coastal cement plants, coastal grinding plants and coastal terminals
- Multinational trading networks
- Shipping overview

Written by Cement Distribution Consultants



Published by International Cement Review

THANK YOU

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