

Smart Sand

Circular Green Economies

by ZaaK Technologies GmbH



25/04/2016







Coastal Erosion



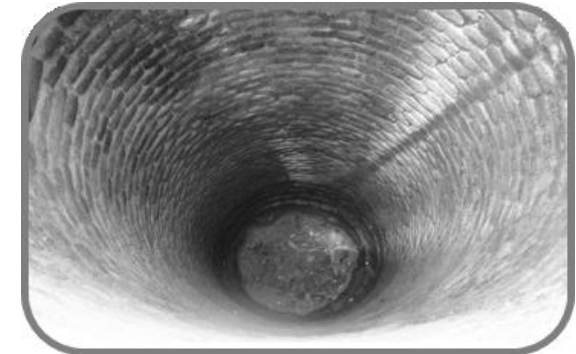
“Sand - rarer than one thinks”.....

70

Countries have illegal Sand mining practices

30

Islands disappearance in Asia




Lowering Groundwater Level

The Solution – Smart Sand

Up to 50% lighter than sand

Regular size & shape



Ecological & Cost effective

Zero impurities

Construction Material (Key Applications)



Plaster/Render



Concrete



Flooring

Niche Areas (Other Applications)



Horticulture

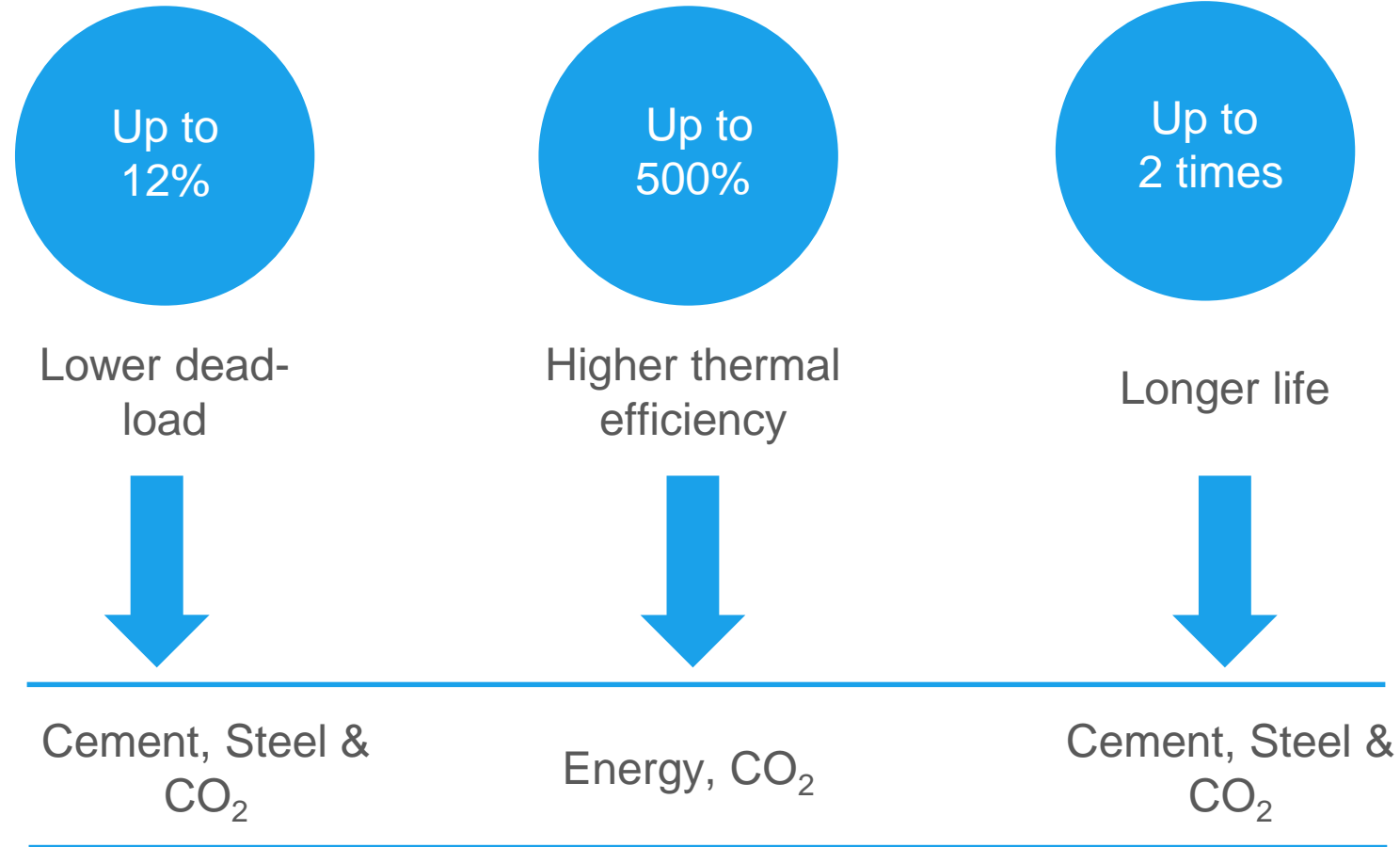


Green roofing



Moulding

Replacing normal sand with Smart Sand in a building leads to:



Savings of

- ✓ Highly scalable technology
- ✓ The technology can process any types of fly ash
- ✓ Smart Sand plant can be easily integrated to existing power plant infrastructures
- ✓ Multiple awards winning patent-pending technology* proven by outsourcing sub-processes



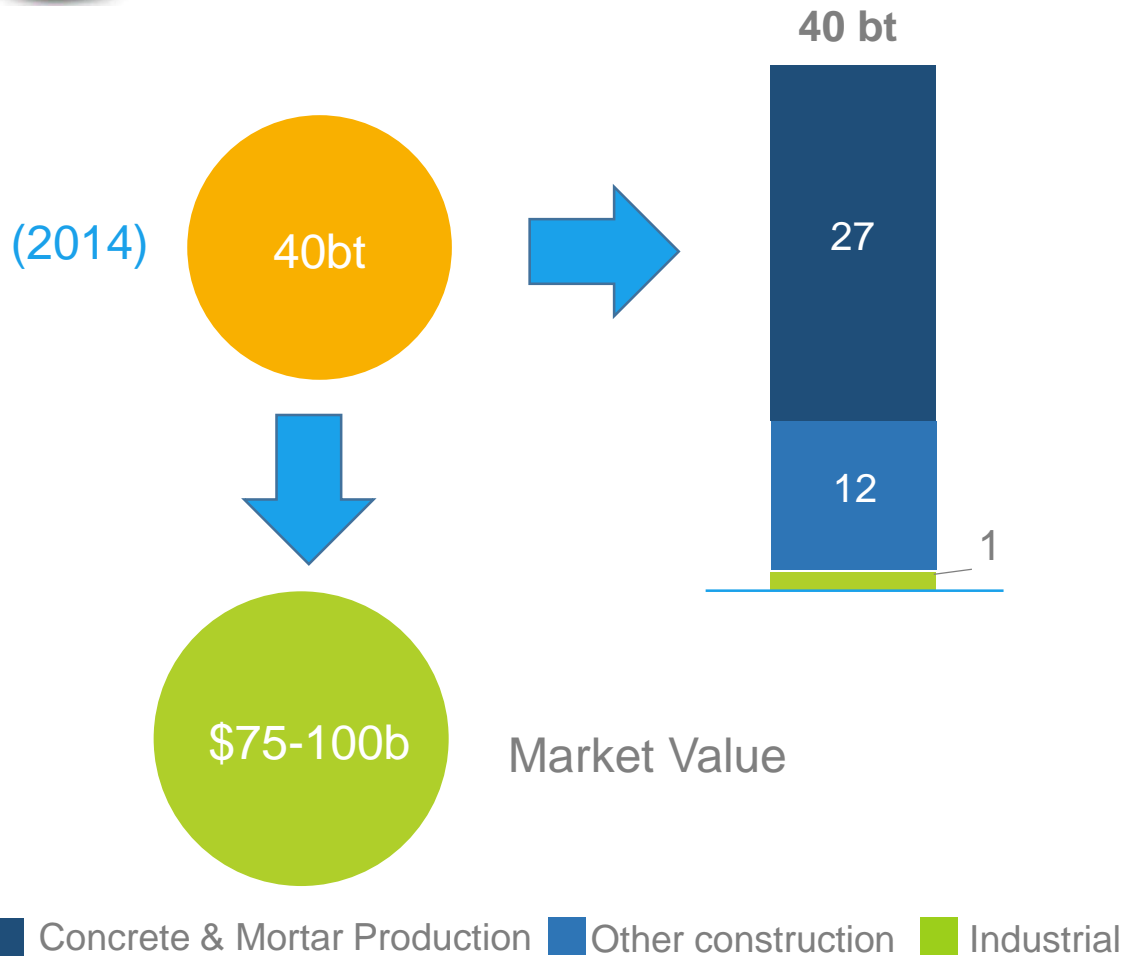
*Innovationspreis Berlin Brandenburg 2015 Award



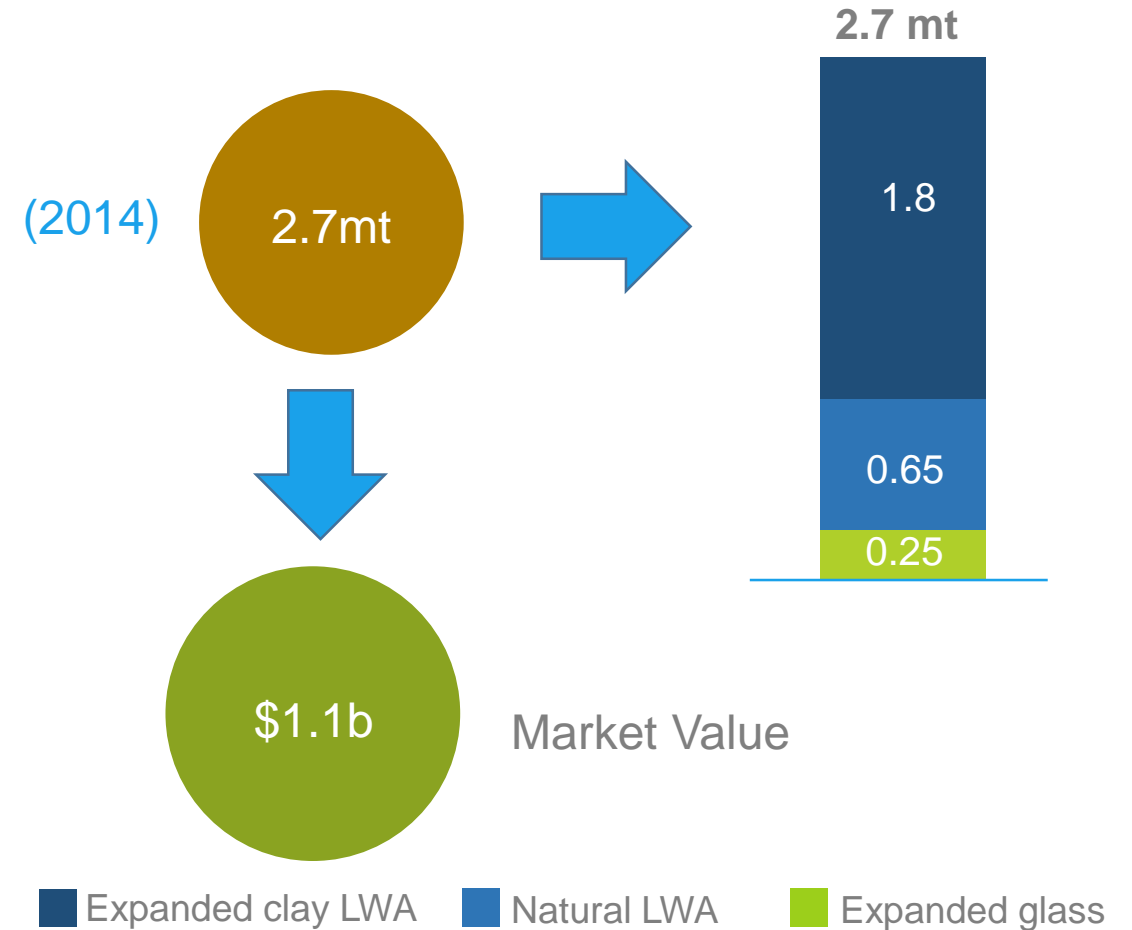
*DST-Lockheed Martin India Innovation 2015 Award



Worldwide Sand Consumption



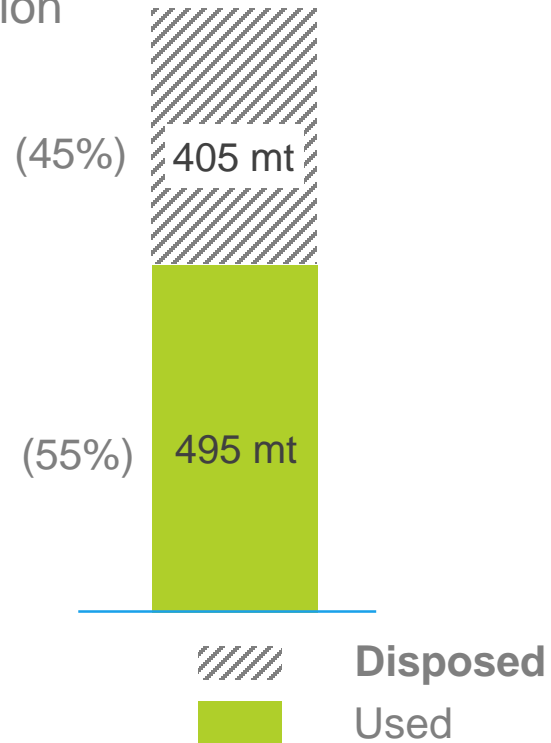
Smart Sand Competes with Lightweight Aggregates (LWA)





Fly Ash Market (2014)

Worldwide Production Σ 900 mt

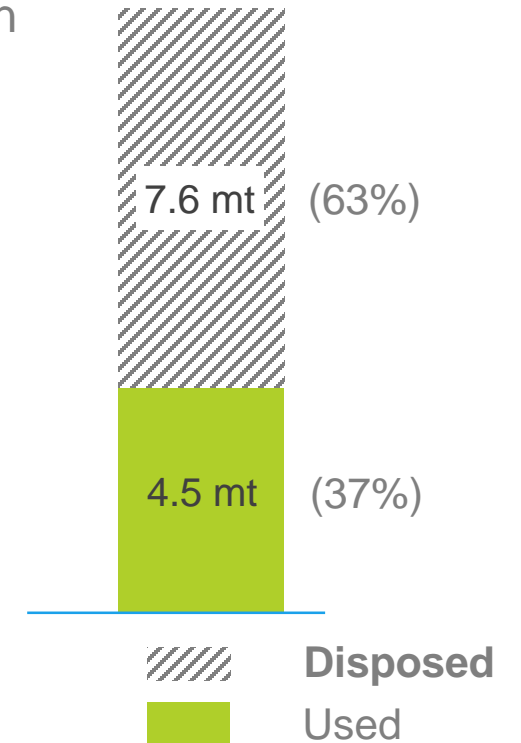


Fly Ash Market (2014)

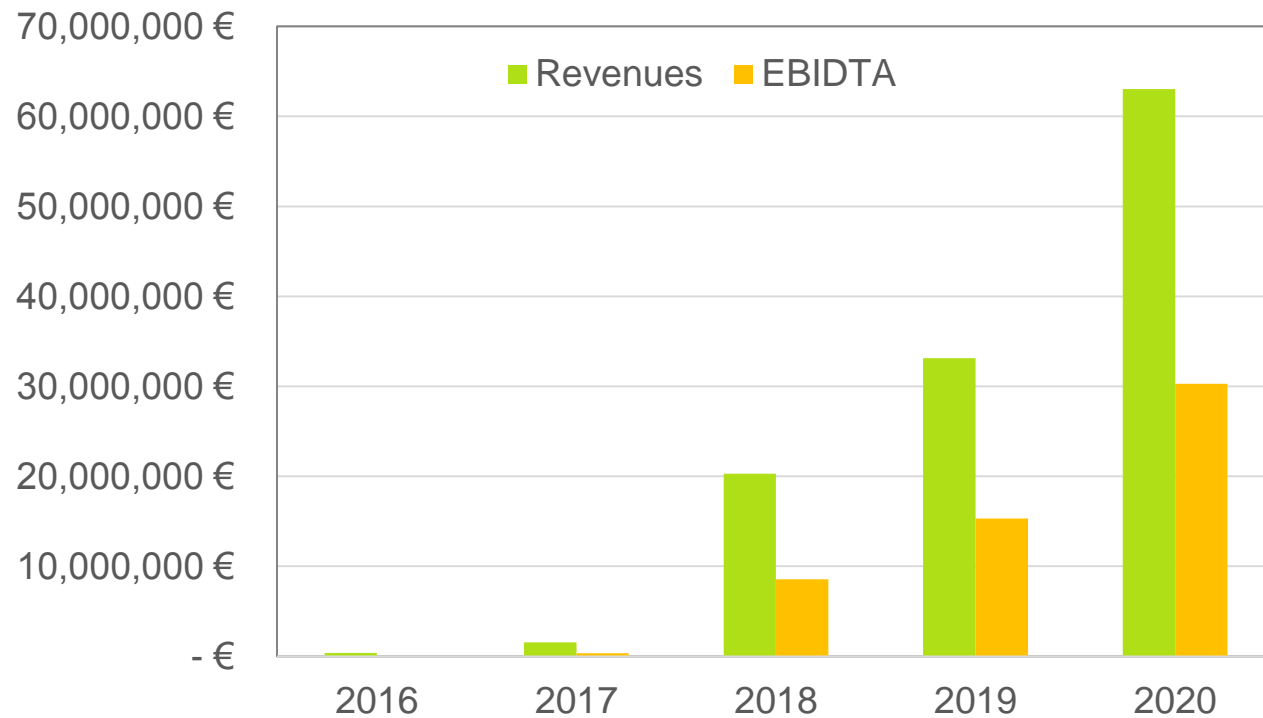
Germany's Production Σ 12.1 mt



Fly Ash



Financial Forecasts



Break-even : 2017

The Ask

