





CITY HALL VENLO

MARY ABU EL FARAG | CSR #3 | 05.09.2023

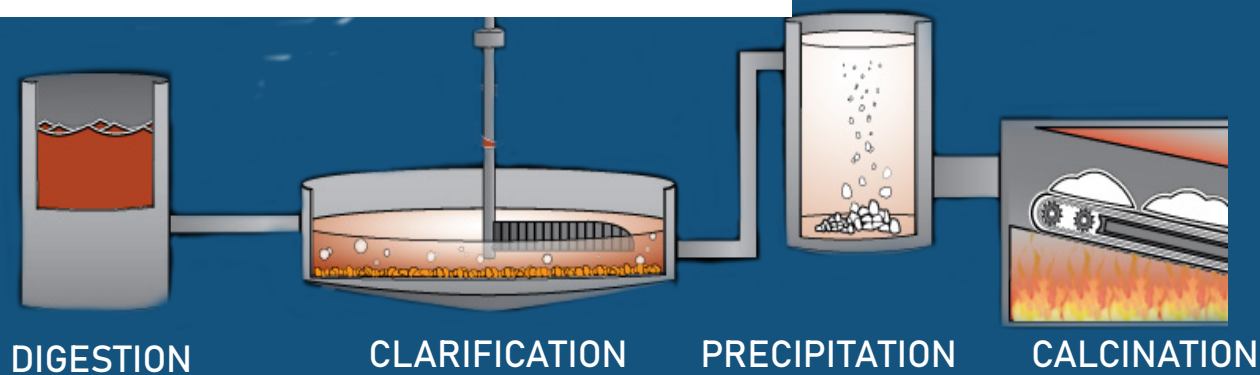
ADVANTAGES

-  HIGHEST STRENGTH-TO WEIGHT RATIO OF ANY METAL
-  WEIGHT = 1/3 OF STEEL
-  ELECTRICITY OF ALUMINUM > COPPER
-  100% RECYCLABLE

DISADVANTAGES

- \$\$\$ RARE AND EXPENSIVE VS STEEL
-  DISTINCTIVE PROCESS OF WELDING

REFINING ALUMINIUM - BAYER PROCESS



RAW MATERIALS

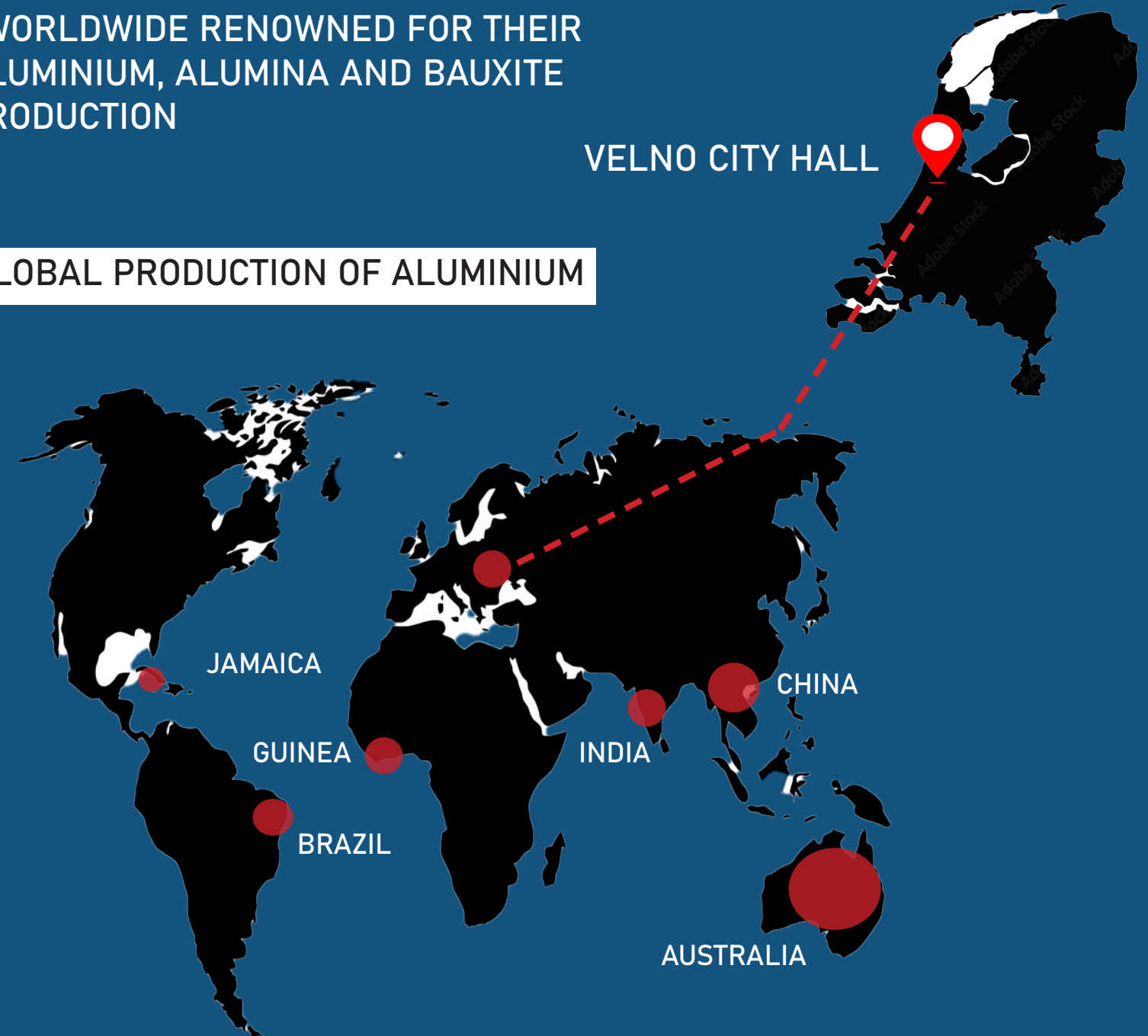


ALUMINIUM SOURCING

ALCOA MATER MANAGEMENT

-WORLDWIDE RENOWNED FOR THEIR ALUMINIUM, ALUMINA AND BAUXITE PRODUCTION

GLOBAL PRODUCTION OF ALUMINIUM



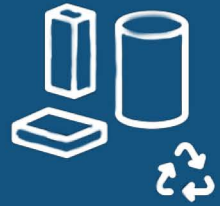
CRADLE TO CRADLE PRINCIPALS

CITY HALL VENLO IS NOT ONLY SUSTAINABLE, BUT SUPPLIES POSITIVE INFLUENCE TO HUMAINS, ENVIROMENT AND ECONOMY.

BUILDING FOCUS



PEOPLE



MATERIALS



DIVERSITY



WATER



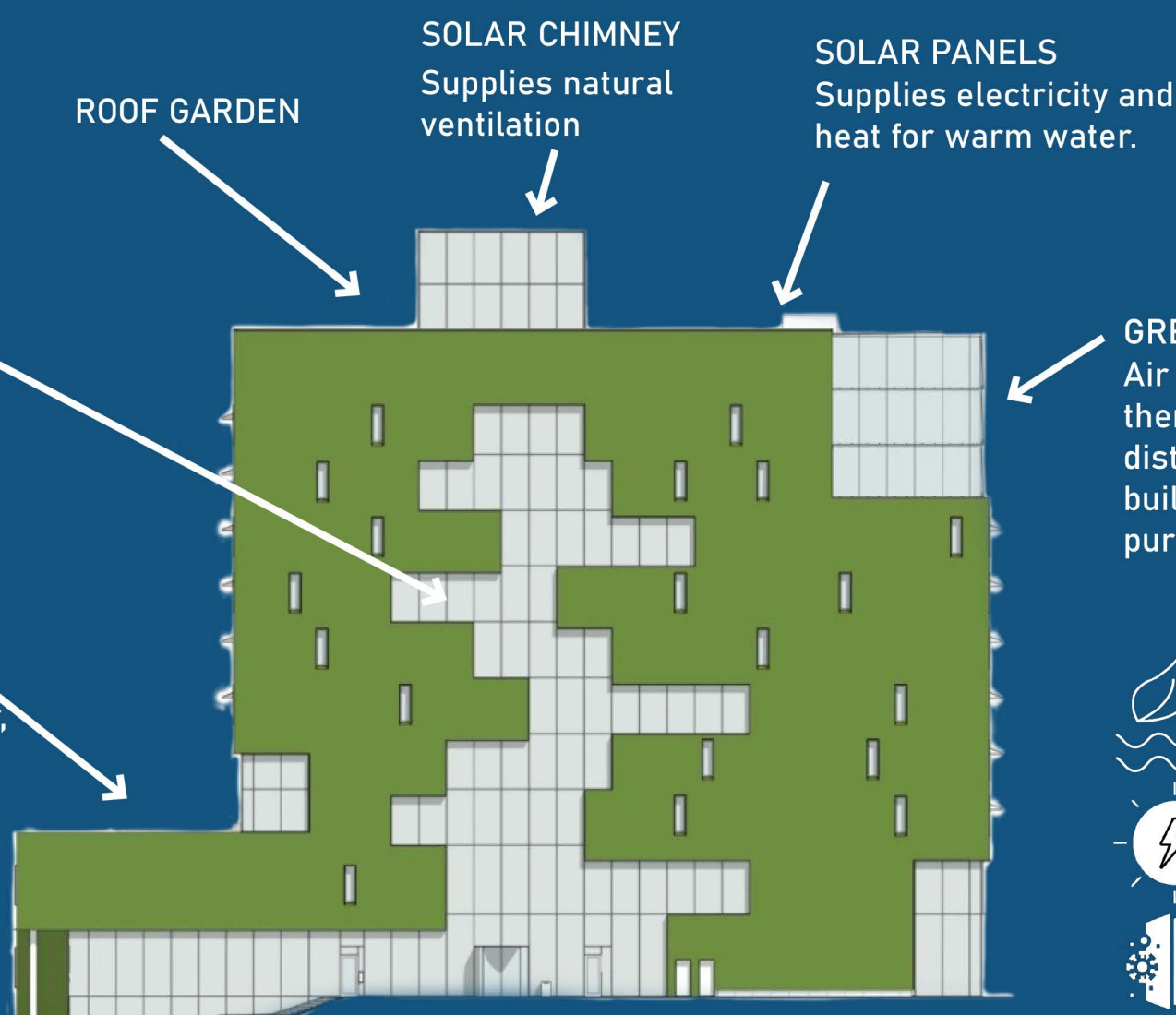
ENERGY



AIR



MONEY



ROOF GARDEN

SOLAR CHIMNEY
Supplies natural ventilation

SOLAR PANELS
Supplies electricity and heat for warm water.

WINDOWS
Decrease the need of artificial light

CAR PARKING
Used to pre-heat air in the building in the winter, or to cool the building in the summer. Charging ports for electrical cars.

GREEN HOUSE
Air heats up by sun, then the greenhouse distributes heat to the building. Greenhouse purifies the air.



EXPLOIT WATER

Rainwater is caught to source hydration to the green facade.

PRODUCE ENERGY

Sunlight is transformed into energy and distributed to fabricate light and heat.

AIR PURIFYING

Green facade is used to deliver clean air.

MATERIALS C2C

WASTE MANAGMENT



INTERIOR

C2C principle was applied to the interior



Floor coverings made of plastic bottles.



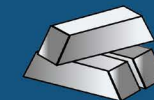
Office chairs are fully recyclable. (C2C certified)

CUSTOMIZED FURNITURE



Use of rubberwood. (C2C certified)

RECYCLING



South facade is made out of aluminium. Aluminum is fully reusable without loss of quality.



North facade is made with mainly of green planting. the pots designed for green facade. (C2C certified)

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