

Welcome to ARC



A part of creating a clean and attractive city and a better climate and environment for future generations.



We manage the resources in waste and return electricity, heating and recyclable materials to citizens of Copenhagen.



- part of the city



1: Waste prevention



2: Recycling



3: Waste-to-Energy

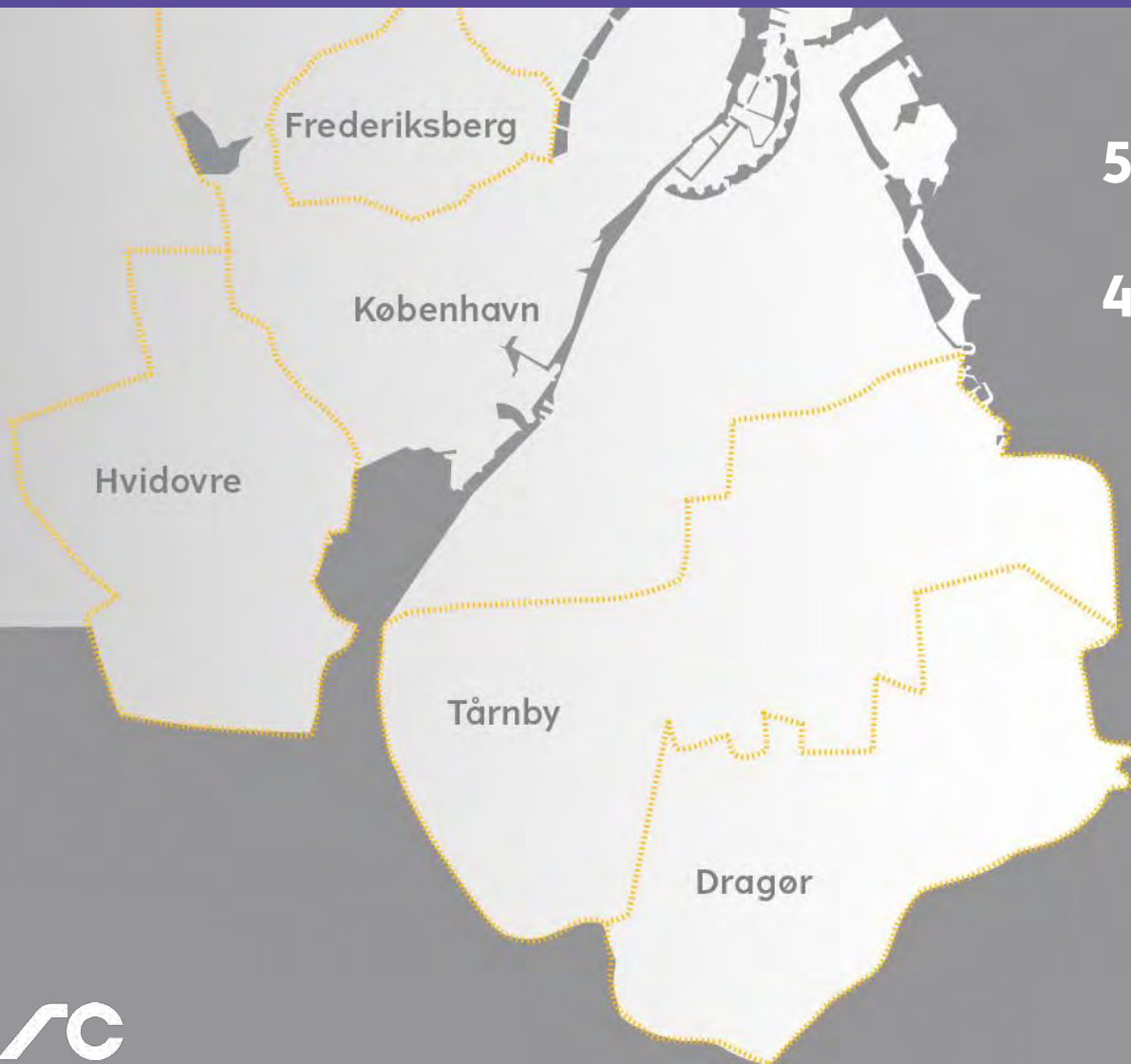


4: Landfill



**Waste Hierarchy
– waste management in
Denmark**

ARC is owned by five municipalities in the capital region



552.000 inhabitants

46.000 companies



ARC operates by a balancing principle where revenue and expences have to balance on a long-term basis.

Business Areas



Recycling

30 minutes

10 minutes



Waste to energy



Sanitary landfill



Transfer station for hazardous waste

Made to Measure

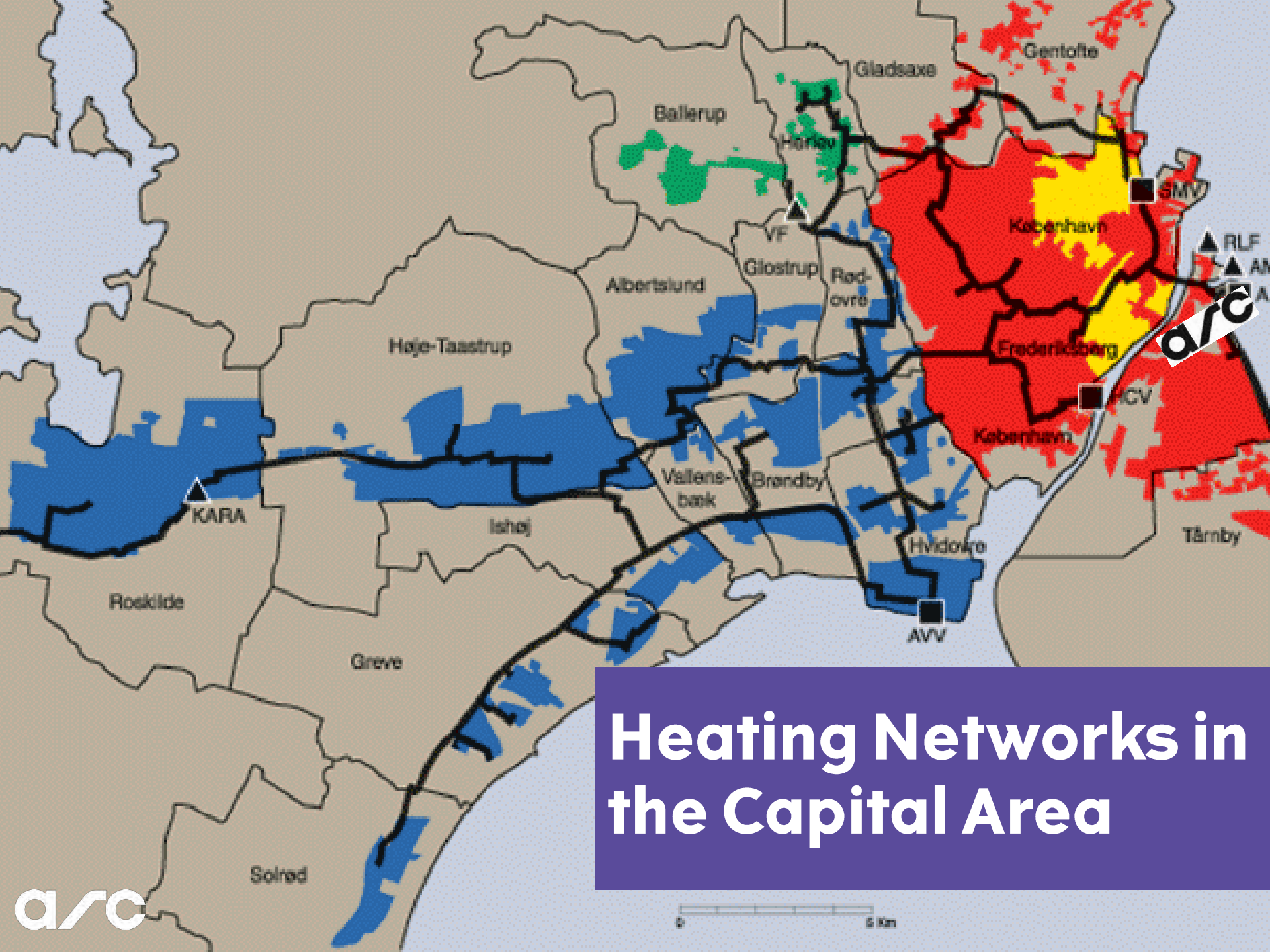


30 minutes

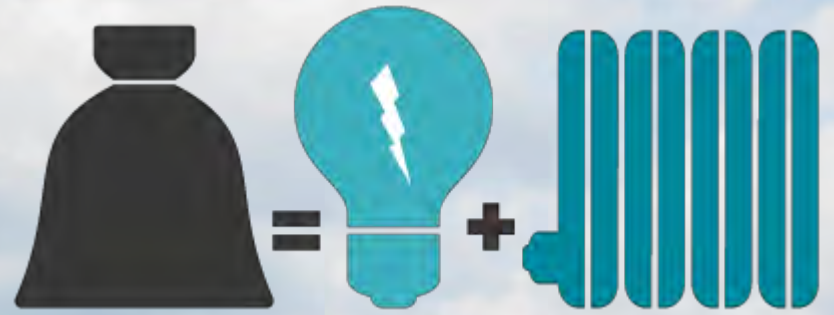
20 minutes

10 minutes

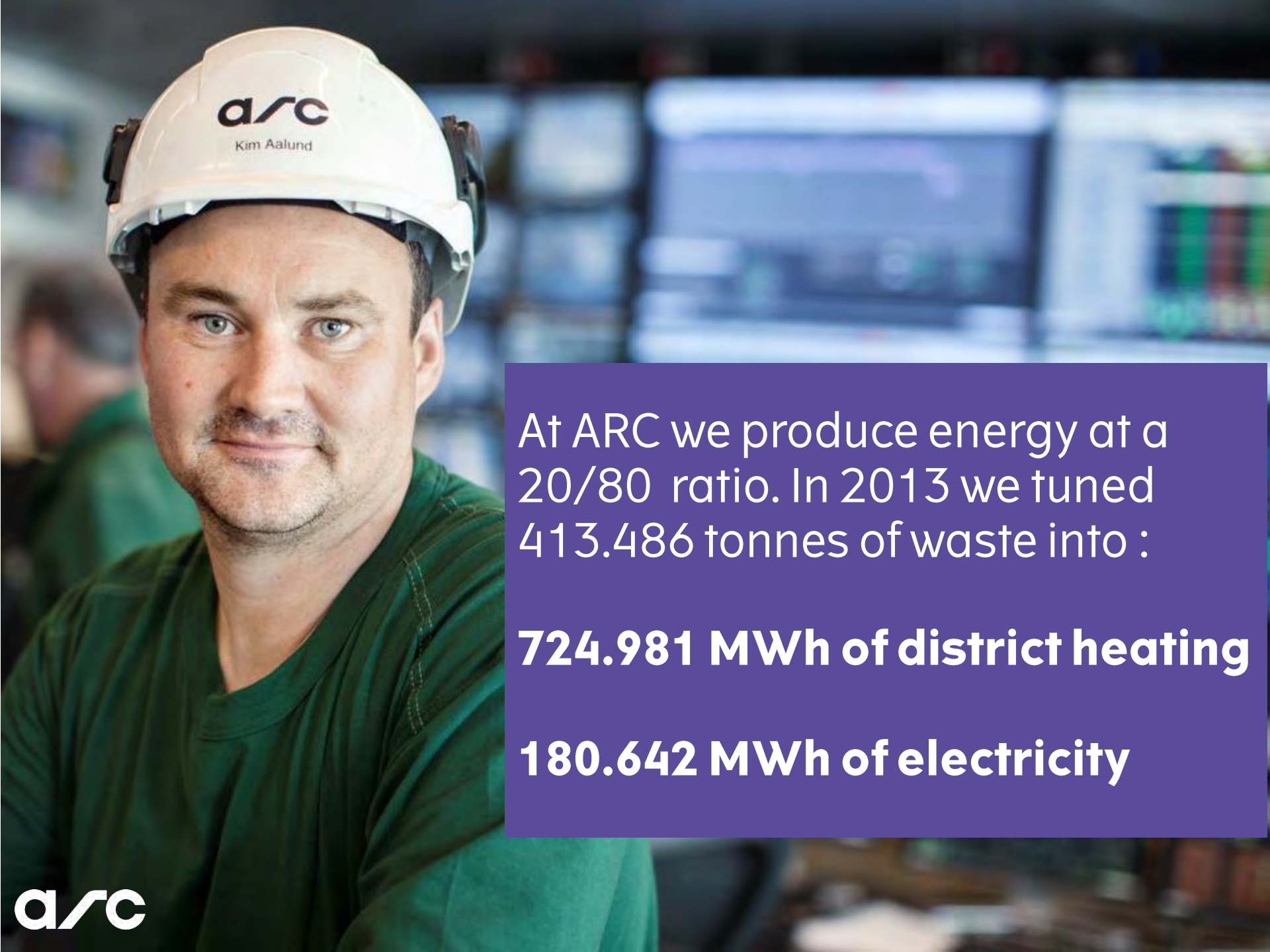
Our unique location contribute to short waste transportation as well as good distribution opportunities for district heating.



Heating Networks in the Capital Area



ARC transform waste from about 552.000 inhabitants and 45.000 companies to electricity and district heating to approx. 150.000 households.



At ARC we produce energy at a 20/80 ratio. In 2013 we tuned 413.486 tonnes of waste into :

724.981 MWh of district heating

180.642 MWh of electricity



 **Recycling station**

 Small recycling station



At our 15 recycling stations ARC receives 93.000 ton waste per year. 88 % of that waste is recycled.

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ET FLOWER
ET FLOWER
ET FLOWER

At the stations the waste is sorted into 33 fractions



Sorting guide

Paper and newspapers

Iron and metal

Cardboard

Bottles and glass packaging

EUR-paller

Windows and carwindows

Garden waste

Clothes and shoes

Tyres

Wood

Cables

Plastic wrapping

Plastic bottles and containers

Asphalt

Concrete an marble

Bricks

Tiles

Sanitary ware

Plaster

Soil, clay, gravel and sand

Domestic appliances

Light bulbs and neon tubes

Televisions

Electronic devises

IT equipment and telephones

Slags plates

Matresses and furniture w. springs

Roots and stumps

Oil, chemicals and batteries

Accumulators

Asbestos and eternit

Waste for landfill

Waste for incenieration



Recycling matters: Every kilo of recycled plastic saves our climate 1,7 kilo CO₂ - in 2013 ARC collected 600 tonnes



Just 2% of the waste is being stored at our sanitary landfill. It contains little or no organic material

ARC is for everyone. In 2013 we had more than 5000 guests.



Part of the future



A man wearing a yellow hard hat and a dark shirt is looking intently at a large, cylindrical industrial tank in a factory or laboratory setting. The tank is illuminated by a bright light, creating a strong highlight. In the foreground, a hand is holding a clear plastic jar containing a dark liquid. The background is slightly blurred, showing other industrial equipment.

ARC is actively involved in the green conversation, and we take part in more than 20 development projects.



Project Example:

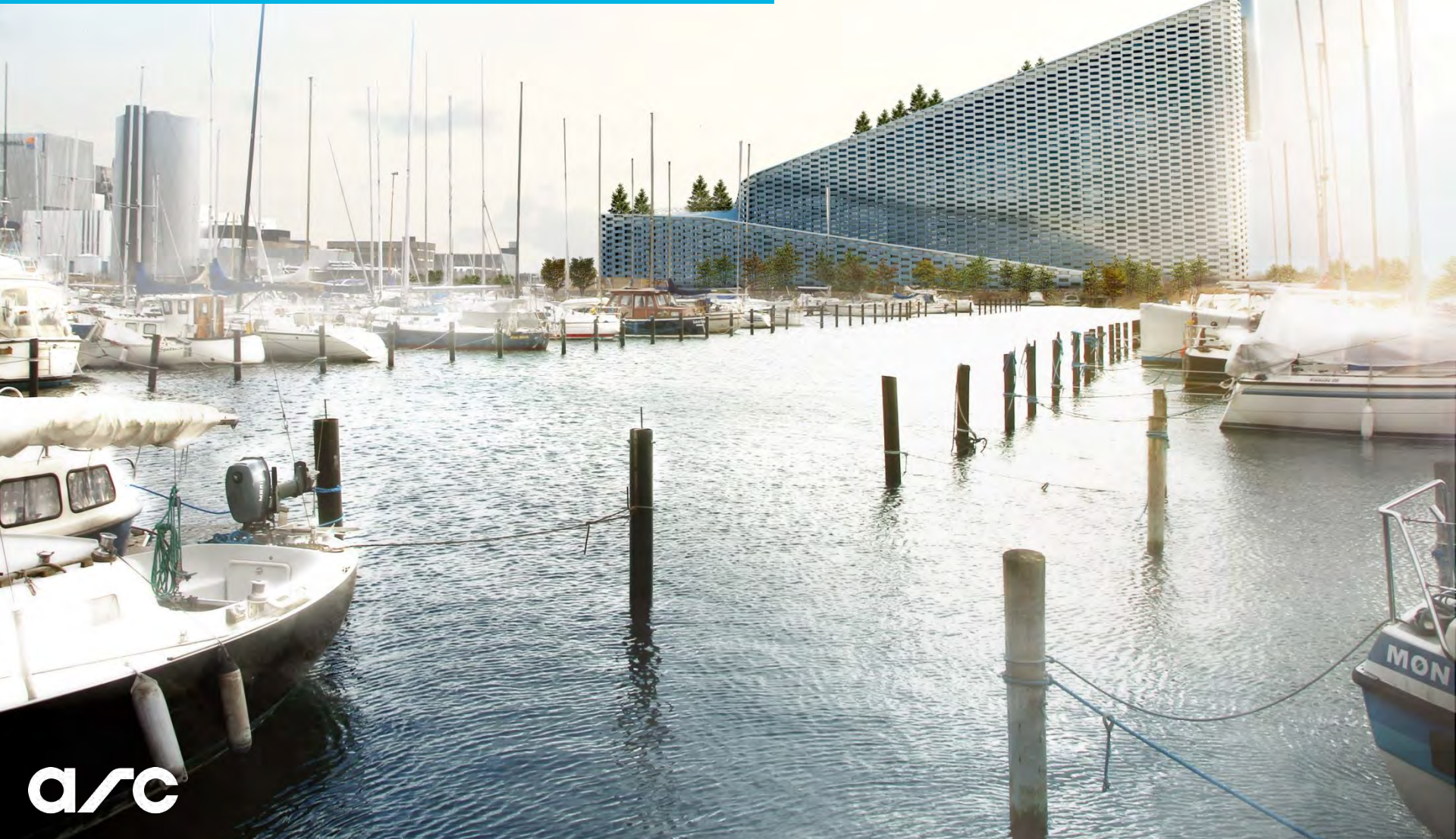
REnescience – sorting your household waste with enzymes

S00

TS=1.3

With REnescience organic waste is separated from recyclable materials as an energy-rich liquid, that can be refined into biofuel .

New waste-to-energy plant: CopenHill 2017



99,9 %
reduction of
Hydrochloric acid

Reduction in CO₂
emissions by more
than 100,000 tonnes

25%
more energy
from the
waste

Dioxin is
removed


NO_x emissions
will be removed
by 96 %

99,5 %
reduction of
Sulphuric acid



a/c





The project CopenHill

Construction of CopenHill waste-to-energy plant commenced in March 2013 and the plant is scheduled for completion in 2017. The cost is approx. 533 million Euro/ 741 million US Dollars

Architect: BIG.

Waste to Energy consulting: Bascon A/S, Moe, Brødsgaard A/S and Rambøll Energi.

Construction: NCC, GEO Copenhagen, Tvilum Landinspektørfirma A/S.

Furnaces: Babcock & Wilcox Vølund, Turbine: Siemens Denmark A/S, Flue gas cleaning system: LAB France and CMS

Control monitoring System: Siemens Denmark A/S

New Recycling Concept: Sydhavn Recycling Station









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