> PRIVA
Creating a climate for growth
OUR AMBITION
To be known as the leading technology and service provider for sustainable urban deltas: circular economies based on greentech and smart buildings.

OUR MISSION
We create an optimal environment in which people and plants experience the best way to grow, using leading-edge technology, products and knowledge. We are proud that our solutions result in lower use of natural resources like energy and water.

OUR VISION
Mankind is growing with towards 9 billion in 2050. By then, about two-third of the world population will live in cities. Amongst them will be a large middle class, demanding a healthy environment and access to safe and nutritious food.
The Priva Introduction video can be found on YouTube using
Facts and figures

**Worldwide**
Represented in > 100 countries
15 offices, > 400 distributors

**450 employees**

**Hardware**
Climate and process control

**Software**
Control software and online services

**Services**
Consulting, training and support

**Horticulture**
We help entrepreneurs to take further steps in their development. From Mexico to China and from plastic multi-span greenhouses to high-tech closed greenhouses.

**Utility Buildings**
We create pleasant working environments in which people perform better while reducing energy consumption.

**Indoor Growing**
Combining our knowledge, we create perfectly controlled environments that result in high yield at the highest possible quality.
INTERNATIONAL PRESENCE

16 branch offices
INTERNATIONAL PRESENCE

> 450 partners in >40 countries
Building Automation

The Rotterdam
*Sustainable building automation*

Sustainable and comfortable living, working and shopping in the Netherlands’s largest multifunctional building.

Marks & Spencer
*Effective energy monitoring*

Westminster Abbey
*Performance and cost benefits*

Higher comfort with less effort.
Co-operation: Dutch Ates

Dutch ATES (Aquifier Thermal Energy Storage)
An economic, resilient and natural energy solution for climate control in buildings. Maximize earths natural capacity to store heat and cold, to minimize the energy use.

Dutch ATES is an co-operation between experienced partners. Partners, like Priva, offer the full range of ATES services and products. From policy planning, to realization. From maintenance to financing.
Horticulture

Leen van Velden flowers
Varieties of seasonal flowers

"The new process computer, Priva Compass, felt good, right from the start. It fits my business perfectly."

Osterloh Strawberries
Strawberries for larger retailers

Ulrich Osterloh’s passion: be the best strawberry producer in Germany, or better still, in all of Europe.

CombiVliet Tomatoes
97 ha high-tech greenhouses

One of the largest tomato companies in the world with a long-term vision.
Co-operation: Recoverypark Detroit

RecoveryPark Detroit

RecoveryPark Farms [RPF] is an urban agriculture enterprise providing fresh, local specialty produce to top quality restaurants using novel lighting technology to support sustainable year-round growing. Starting with high tunnels and progressing to hydroponic greenhouses using natural standards, they grow chef requested specialty produce which reaches their restaurants within 24-48 hours (and within a 300 mile radius).
Urban and Indoor Farming

Urban Farmers De Schilde
Largest rooftop farm in Europe

1200 square meters high tech greenhouse and 370 square meters indoor fish farm with maximum re-use of hydroponics and fertilizers.

80 Acres Farms
Indoor grown fruits and vegetables

If one container farm equals two acres of farmland, imagine what you can grow with 80 Acres.

Medicinal herbs
Canadian grown medicinal herbs

Health Canada Licensed Producers of medicinal herbs in North America.
TODAY ...
More greenhouse developments all over the world ...
More urban farming and new developments ...
More training and education all over the world ...
Looking at all these developments it looks like we will have no problems feeding the world in 2040!

With our current production we can feed 12 billion people today! And with eating less meat even more!!
So ... What is the problem?
Farmers have to produce more and more for less ...
A farmer with 30 acres ...

One generation later the son needs 180 acres to have the same income as his dad!
And what happens if a ‘schnitzel’ may only cost 2 dollar’s ... How many pigs do you need in one farm to reach that price?
The market of ‘Fresh Produce’
does not behave like a free market ...
On African markets you can buy tomatoes from Spain at one third of the price of local produce ...
So African people immigrate to the north, while food is exported to Africa ...
The waste is enormous ...
The unsold bread of Vienna is enough to feed Graz, the 2nd city of Austria. While most wheat is from India, where 200 million people are hungry.

Source: http://www.we-feed-the-world.at
Farmland in Europe is subsidized to grow corn for biofuel, while destroying the rainforests in Brazil to export soy for cattle feed ...

Source: https://www.worldwildlife.org/threats/deforestation
If this is the status of our food production today, we have a serious problem!

Continue like this we can not feed the world in a sustainable way!
40% of the total budget of the EU is for Agricultural subsidy. With all other subsidies from EU countries and USA: > $500 billion per year

Waste per year in this world: $600 billion per year

Human Aid on food: $300 billion per year

The production and distribution of fossil fuels is also still subsidized: $5300 billion per year! And environmental damage is for free ...
7000 BILLION
TO KEEP THE SYSTEM ALIVE
WHAT IS THE PLAN?
Disruption Ahead
Three major trends ...
1. Technological breakthroughs will turn the world upside down within the next 10 years!
New technological breakthroughs:
(www.techcastglobal.com)

2015: Breakthrough telemedicine
2017: Market breakthrough Nanotechnology
2020: Breakthrough Smart Robots
2025: Solar-energy!

<table>
<thead>
<tr>
<th>Prognosis 2030</th>
<th>EIA</th>
<th>Google</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>40 GW</td>
<td>380 GW</td>
</tr>
<tr>
<td>Biomass</td>
<td>10 GW</td>
<td>23 GW</td>
</tr>
<tr>
<td>Sun</td>
<td>4 GW</td>
<td>250 GW</td>
</tr>
<tr>
<td>Increase in electricity consumption</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>CO₂ emission</td>
<td>+ 16%</td>
<td>-/- 40%</td>
</tr>
<tr>
<td>Dependence on imported oil</td>
<td>+ 11%</td>
<td>-/- 33%</td>
</tr>
</tbody>
</table>

Wim de Ridder: Two very different energy scenarios for 2030.
Within 10 years we will have:

Tele Medicine, Nano technology, High Tech Food, 3D-printing, Robotics, Smart Mobility, The Internet of Everything, Solar energy, Sharing-platforms, Online learning, -buying and -working …
People will create more and more new business models with all kinds of integrated solutions based on affordable and available technology solving many environmental problems!
2. Anything that adds no value anymore will disappear!
OIL COMPANIES ... WHERE TO PUT YOUR MONEY?
BANKS ... PAYMENTS, MORTGAGES AND CREDITS ?
DOCTORS ... GOOGLE, PHILIPS, APPLE, PERSONALIZED FOOD
POLITICS ... ONLY PROTEST VOTES
3. It will be the century of the cities!
Cities with a projected 2030 population of more than 10 million

2030 population
- 40M
- 25M
- 10M

Change in population from 2014 to 2030
- Pop. decline
- 0-15%
- 16-30%
- 31-45%
- 46% or more

Bolded cities: projected to surpass 10 million people between 2014 and 2030

Tokyo and Osaka
Both are expected to lose population due to low birth rates and declining immigration.

Luanda, Angola
Its population is expected to grow to 10.4 million in 2030, from 5.3 million in 2014, the fastest growth rate among the 2030 megacities. Lagos and Kinshasa are close behind.

Source: United Nations World Urbanization Prospects

GRAPHIC: ALEX TRIBOU / BLOOMBERG VISUAL DATA
CITIES LOCATED IN RIVER DELTAS ...
240,000 PEOPLE A DAY MIGRATE TO CITIES
Shanghai, the city ...
NEED CLEAN AIR
NEED SAFETY
NEED HEALTHY AND SUFFICIENT FOOD
Warmly Welcome Priva Delegation Headed By Mrs. Meiny Prins From Holland Visit Us
Green Belt close to Doha, Qatar
Green Dragon Lake
Cities will increasingly integrate their green belts into metropolitan developments ...
and people will find more opportunities
to create new value
with all kinds of integrated solutions
based on affordable and available technology
solving many social and environmental problems!
THE NETHERLANDS: a metropool located in a Delta
1 hectare of greenhouse can provide 1200 homes with heat...
Delft Blue Water
Reuse of waste water for food production
Nova Lignum
Plant residu becomes building material
Wattway
Driving on a road with Solar panels
COW GARDEN
Milk production in the city
GREEN
CIRCULAIR
LOW CARBON
SMART
SOCIAL
How beautiful is the future ...
... if cities integrate their green belts in urbanized areas.
It is **the** perfect start to the circular economy!
LET'S BUILD THE SUSTAINABLE URBAN DELTA
THANK YOU