## **KPA** Unicon

### Energy for good.

### Kiev 6 Feb 2020

Energy for good. Henri Riihimäki Teemu Koskela

## **KPA Unicon briefly**



## Professionals

250

Family owned company

## Turnover

80 M€

**Country organizations** 

# 8 countries

Founded

1990

### **Business Idea**

We are KPA Unicon. We believe clean energy production makes sense for everyone. Here's how we're doing our part.

We **Create** and implement clean-energy solutions. We **Renew** existing energy-production systems with cleaner technologies. We **Interact** by empowering energy producers with innovative digital tools. We **Lead** the way with advocacy and initiatives that create better value for our partners.

That's how we harness our energy for good.



### Mission and vision statement

Why we do what we do

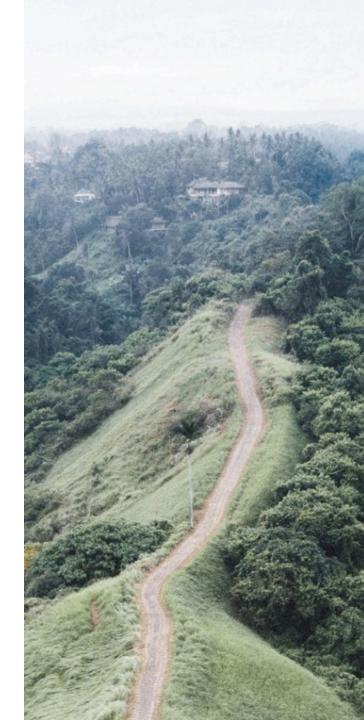
To inspire, lead, and accelerate the worldwide adoption of locally produced clean energy.

### Where we're headed

To better our world and change lives through clean energy innovations.

**OUR MISSION** 

OUR VISION







## Create

#### Turnkey clean-energy solutions

| Biomass                                      | Waste    | Gaseous & liquid | Heat recovery |
|--|----------|------------------|---------------|
| Renefluid<br>Biograte<br>Pellet<br>Renegrate | Reneflex | WF/SF<br>WT/ST   | HRSG          |



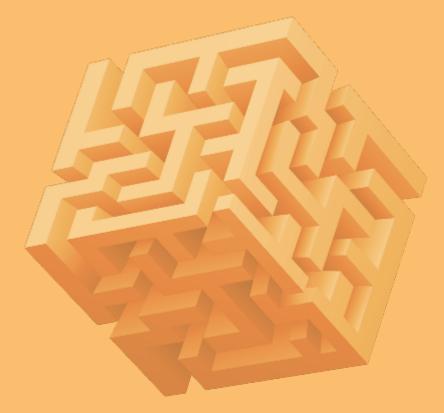


## Renew

#### Cleantech plant upgrades

| Efficiency | Emissions control       | Lifespan               |
|------------|-------------------------|------------------------|
| Retrofit   | Bag filter<br>Condenser | Repairs<br>Maintenance |
|            | De-Nox                  | Spare parts            |





## Interact

#### Digital insights & control

Plantsys <sup>®</sup> Operation Maintenance Material flow Reporting





## Lead

#### Advocacy, vision & opportunities

CaaS

0&M

Expertise



## **KPA** Unicon

### Success stories



## **Croatia - Power Plant delivery**

Successfully executed power plant project and now ongoing 14 years operation and maintenance Agreement



Grubisno Polje, Croatia Location Biograte 25 MWth / 5 MW<sub>e</sub> / 92bar Solution Handed over 2019 Contract status Now in operation phase Project status **Operation personnel hired** Duration 16 months + 14 years operation Power plant is running and supplying Highlights<sup>-</sup> electricity to grid. KPA Unicon has local O&M personnel to take care of daily operation. Power plant exceeded all the guaranteed perfomance figures in tests.



Akuo Energy is an integrated company, which has chosen to internalize all the expertise needed by a developer and operator of renewable energy projects.

Their group revenue was 205 million euros in 2017 and they had 1035 MW capacity in service and under construction. Akuo Energy has invested more than 1,8 billion EUR since inception as end of 2017.

## **First plant commissioned** in Chile

The level of emissions produced by the mill has diminished, and the biomass fuel costs have dropped dramatically

Location \_\_\_\_\_

Solution

Contract status

Duration Highlights-

Valdivia, Chile **Biograte 20 MWth** —— Handed over 2019 Project status — Now in operation phase Support contract signed 18 months

The delivery of the boiler plant included all process equipment, buildings, installation supervision, commissioning and operational training. The delivery was made in agreed schedule and according to original budget.





The CMPC Group is one of the world's largest forest industry companies, with a turnover of over 5 billion dollars. The steam boiler plant built at CMPC's Valdivia mill is an important opening in the South American market for KPA Unicon.

(2)

# Dalkia Bazancourt, France

New Renefluid biomass power plant

Solution —

Project status —

Duration —

Highlights-

Location — Bazancourt, France Renefluid, 45 MW / 90 bar Commissioning 3/2020 18 months

Our first large scale power boiler. Customer feedback has been very positive concerning the progress

of the project.





Dalkia offers customers expertise in developing, building and managing innovative, greener, more cost-effective energy solutions to enable the sustainable growth of cities and companies. Energy efficiency is our expertise.

4 billion in revenue 15 500 employees More than 2000 industrial sites More than 17 500 commercial and service-sector facilities More than 3000 healthcare facilities More than 2 million multi-dwelling units managed

### Imatran Lämpö Finland

New Renefluid biomass heating plant saving costs and cuts use of fossil fuels

Duration — 18 months

Highlights-----

Location \_\_\_\_\_ Imatra, Finland Solution ——— Biograte, 2x15 MW + FGC Project status ——— Handed over 2017

> Local biomass utilisation saves money and environment. Due to new Biograte boiler plant Imatran Lämpö was able to lower energy price and improve its own profitability.



## Fortum Kivenlahti, Finland

New Renefluid biomass heating plant



#### Location

- Solution
- Contract status \_\_\_\_\_ Signed 11/18
- Project status ———
- Duration -
- Highlights<sup>-</sup>

- Espoo, Finland
- Renefluid, 45 MW / 16 bar + FGC
- - Ongoing (commissioning 2/2020)
  - 16 months
  - First large biomass district heating plant for KPA Unicon. Milestone project in Helsinki metropolitan area.

### **e**fortum

Fortum is a leading clean-energy company developing and offering solutions for our customers in electricity, heating, cooling, as well as solutions to improve resource efficiency. They also provides Services for the power generation industry and solutions for consumers so that they can be smarter in their energy choices.

4,5 billion in revenue 8108 employees

## Danone New Zealand

First steam plant to leading, global food & beverage company

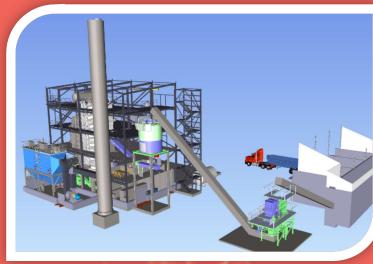
#### Location

- Solution
- Contract status \_\_\_\_\_
- Project status —
- Duration –
- Highlights-

Balclutha, New Zealand
Renefluid, 14,4 MW / 35 bar
Signed 9/19

- Ongoing
- 18 months

New renewable steam boiler plant to Danone Nutricia NZ Limited. Danone has started global transition towards renewables. Due to rapid load changes BFB technology is excellent choise for the application.





Danonen is a leading global food & beverage company built on four businesses: Essential Dairy and Plant-Based Products, Waters, Early Life Nutrition and Medical Nutrition.

24,7 billion in revenue 100000+ employees in over 55 countries

## The world is our playground

- **114** Biomass boiler plants with Biograte combustion system
- **26** Biomass power plants with Biograte combustion technology
- **1650** Oil and gas boiler plants
- **66** Biomass boiler plants with Renefluid (BFB) combustion system
- 12 Biomass power plants with Renefluid (BFB) combustion technology
- **135** Biomass boiler plants with Renegrate combustion system

Energy for good.

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# Always local

# Always future oriented

