



South Africa & the Netherlands
Working together towards integral solutions

**Creating jobs and value from
woody biomass residues**

Working together to create jobs and value from woody biomass residues

Valorising biomass residues holds a major potential for South Africa in terms of waste minimisation, job creation and investment opportunities. In addition, it can create reliable access to secure, affordable and clean energy.

Six companies from the Netherlands have joined forces to develop business cases for valorising solid organic (woody) biomass. Together with local stakeholders they will set up advanced value chains, collecting and sorting woody biomass residues and producing products, fuels and energy with value for both local and foreign markets.

Using an integrated and sustainable approach, the cluster is seeking long-term collaborations with South African companies and organisations to create successful and viable business opportunities. By working together, we can minimise the negative impact of waste on the South African environment while bringing improved health, job opportunities and economic benefits.

What is the cluster planning to do in South Africa?

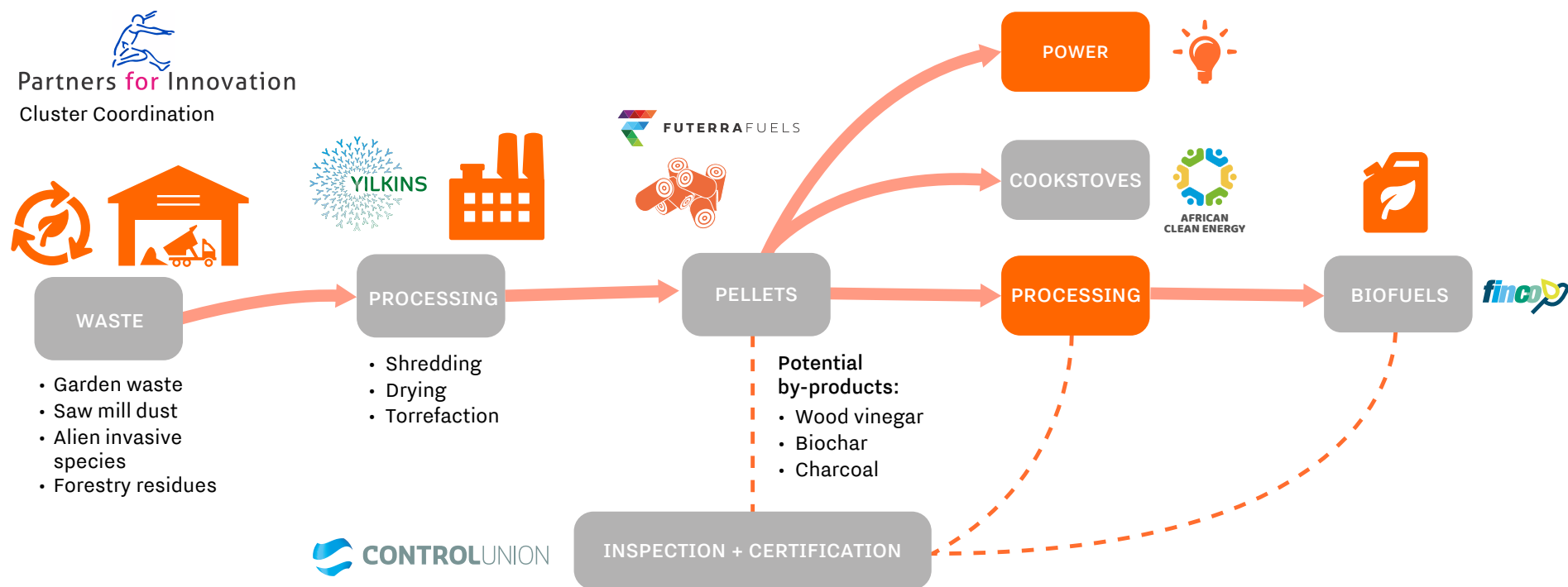
The first concrete step is the purchase and refurbishment of a mothballed pellet factory and to get it operational again in the first quarter of 2021. This includes:

- Secure the long-term availability of wood residues from municipal parks and gardens, forestry and sawmills operations and harmful invasive trees and plants
- Process and pelletise these woody residues
- Ensure compliance to international sustainability standards
- Distribute and sell the pellets to local households (clean cooking) and industries (industrial boilers), companies producing biofuels and export for power production

In the course of 2020 new initiatives for biomass valorisation will be developed, e.g. new pellet factories in other regions.

How can you get involved?

We are looking for partners with access to woody biomass residues. In addition, we are interested in cooperating with local stakeholders to develop new biomass valorisation projects (e.g. pellet factories) in the region. Don't hesitate to contact us!



What are the benefits for local communities?

- Creation of over 1,000 jobs
- Investment opportunities in a solid infrastructure
- Affordable energy for approximately 25,000 households
- Cleaner energy contributing to a 200-kton CO₂ reduction
- Compliance to international sustainability standards (e.g. RSB, FSC)
- Improved health by providing safe and clean cooking
- Reduction of alien invasive trees and plants improves groundwater levels
- Waste reduction resulting in less landfill
- Long-term collaboration between Dutch and local stakeholders



Cluster Partners



Partners for Innovation

Partners for Innovation (Pfi) is a Dutch based consultancy and project development company. Pfi was founded in 2004. Since 2009 Pfi works in Sub Sahara Africa, amongst others South Africa, focussing on renewable energy and valorisation of sustainable biomass. Pfi has offices in Amsterdam (Netherlands) and Niamey (Niger) www.partnersforinnovation.com



African Clean Energy (ACE) is a Dutch-South African social enterprise focusing on enabling decentralised access to clean energy to rural households in Sub-Saharan Africa and Southeast Asia. Headquartered in Amsterdam, ACE's flagship factory is in Lesotho. It has further operations in Cambodia, Uganda and Kenya. www.africancleanenergy.com



Control Union Certifications is a Dutch certification and inspection organisation. CUC is also involved in sample analysis. CUC focuses on the development of services in sustainability and industrial supply chains for feed, food, forestry, biomass, bioenergy, social compliance and textile markets. CUC has offices in more than 70 countries worldwide, including South Africa. www.certifications.controlunion.com



FinCo Fuel Group is a Dutch Company, involved in the downstream fuel market, offering a portfolio of fuels across Northwest Europe. FinCo covers the whole value chain from refinery gate until end-user. FinCo is committed to increased use of cleaner fuels through a portfolio of alternative fuels. www.Fincofuel.com



Futerra Fuels is a producer of torrefied and white pellets. Futerra's torrefaction technology, provided by Yilkins, enables highly efficient heat transfer to the biomass particles. The company has a torrefied pellet production plant in Portugal. Futerra Fuels was founded in 2015 by a group of Dutch and American entrepreneurs with experience in wind farms and green energy. www.futerrafuels.com



Yilkins is offers technological solutions such as drying, torrefaction and combustion of solid biomass residues. The Yilkins technology and business philosophy are fully inspired by the "local for local" approach and are designed to help entrepreneurs, public institutions and local authorities to create a positive impact on their own communities. www.yilkins.com



Liaison

iLive Sustainable Development is a project and technology development company in the waste-to-energy and bioenergy sector focussed on high social-environmental impact projects. To date iLive has developed biomass pelletization, biodiesel, and tyre pyrolysis projects, and is pursuing clean cooking stoves to add to their portfolio. www.iLiveworld.co.za

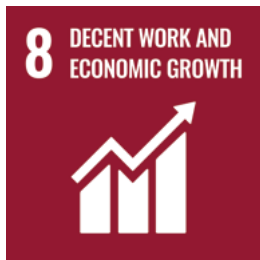
Partnering for a sustainable future

Six Dutch companies, specialised in biomass valorisation, have teamed up to develop new business initiatives in South Africa using wood residues. The companies are supported by the Dutch government; Netherlands Enterprise Agency (government agency which operates under the auspices of the Ministry of Economic Affairs and Climate Policy) and the Embassy of the Netherlands in South Africa.

This public-private partnership builds upon previous and ongoing cooperation activities focussed on bioenergy and biomass valorisation between South African and Dutch organisations. An example of this cooperation is the 'Plan of Action for Biomass' that was drawn up together with, amongst others South Africa's Department of Energy and ESKOM. Another example, resulting in a concrete and successful business, was the support given by the Dutch for the development of the Bio2Watt Bronkhorstspuit biogas project. This biogas installation started operation in 2015 and, to date, converts cow manure, food waste and other organic waste streams into electricity. The electricity is sold to the BMW factory in Rosslyn near Pretoria.

This new partnership, again will work towards sustainable use of materials and energy supply and at the same time stimulate local business to find new applications for waste and prevent it from being 'wasted'.

This public-private partnership contributes to the following Sustainable Development Goals:



Let's cooperate!



Kingdom of the Netherlands

Cluster coordinator

Emiel Hanekamp, Partners for Innovation
The Netherlands
+31 (0)6 515 425 39
e.hanekamp@partnersforinnovation.com

Embassy

Kingdom of the Netherlands
in South Africa
Pieter Lolkema
PRE-EA@minbuza.nl

Liaison

Werner Euler, iLive
South Africa
+27 (0) 11 486 1657
info@iLiveWorld.co.za