Welcome to Södra Cell Värö

One of the largest and most modern pulp mills in the world.
In Södra’s world, everything starts with the forest.

Södra is Sweden’s largest forest-owner association, with more than 50,000 forest-owner members. Södra is also an international forest industry Group, with operations based on processing its members’ forest products.

Södra’s business is built on value-generating relationships and a long-term approach. The overall assignment from its owners is to promote the profitability of their forest estates, which means providing advice and support for responsible forestry, and securing a market-based rate of return on their forest products.

The wood from members’ forest estates is processed in Södra’s mills and becomes sawn and planed timber, interior wood products, biofuel and pulp for the pulp market. The Södra Group generates annual sales of approximately SEK 17 billion and employs some 3,500 people in its mills and forestry operations. The majority of its products are sold on the international market.

HIGHEST-GRADE PULP
Södra is one of the world’s leading suppliers of softwood sulphate pulp for the pulp market. Södra’s total production of paper and textile pulp will rise to some 2 million tonnes by 2020.

The Group has three pulp mills – Mönsterås, Mörrum and Värö. The mills employ a total of 1,100 people and generate annual sales of almost SEK 9 billion. Södra Cell’s pulp mills are well-invested and maintain high environmental and energy standards. Södra Cell holds certification for its occupational health and safety, quality, environment and energy management systems, as well as Chain of Custody certification for its wood.

Södra aims to be a leading forestry Group, a highly productive and energy-efficient pulp manufacturer and an attractive company for both customers and employees.

Welcome to our world!
Based on wood as the raw material, Södra Cell Värö produces paper pulp, green electricity, district heating and biofuel. The expanded plant, scheduled to commence operation in 2016, will produce 700,000 tonnes of paper pulp and 1.6 TWh of energy per year. The plant operates 24 hours a day, 365 days of the year, with a six-team shift pattern. Maintenance, process development and other administrative procedures are conducted during normal working hours. Some 350 people are employed at Södra Cell Värö in a variety of professional roles, ranging from process technicians, maintenance technicians, instrument technicians, electricians to engineers, systems engineers, lab technicians and various administrative occupations.

We attach great importance to bringing departments and groups together to create good working relationships and an understanding of each other’s tasks. This helps to create a workplace where employees feel satisfied and happy.
HISTORY
1972  Inauguration of Värö Mill.
      Annual production 219,000 tonnes.
2001  District heating plant constructed,
      provides heating for 50 percent of the
      Municipality of Varberg.
2005  Södra’s R&D Department relocated
      to Värö.
2016  Inauguration of the expanded plant.

KEY INDICATORS
Capacity  700,000 tonnes paper pulp and 1.6 TWh
          of energy per year (following expansion).
Employees  There are 350 employees at Södra Cell
             Värö. The industrial site also houses Södra
             Wood’s Värö sawmill with 200 employees,
             Södra Innovation and New Business with
             50 employees, Södra Skog’s Western
             Region with 20 employees, and staff
             functions including Södra’s payroll centre
             and IT with 10 employees. Södra employs
             some 620 people in total at Värö.
Södra’s pulp products

Södra Cell has a broad product portfolio, comprising both paper and textile pulp. The raw materials used are spruce and pine, as well as hardwood (mainly birch). Södra has unique knowledge in how forest raw materials should be sorted for the right end-product properties. Paper pulp products are divided into four main categories, textile pulp into two.

**PAPER PULP**

**Södra Green**
Södra Green is mainly produced from sawmill chips of spruce and pine, which have long and strong fibres. The pulp is therefore ideal as reinforcement pulp, which increases the tensile and tear strength of some types of paper. The pulp also helps to give paper high porosity, stiffness and bulk.

*End-products:* magazines, catalogues, coffee filters, packaging paper, paperback books

**Södra Black**
Södra Black is made from large numbers of young pine trees removed in thinning operations. The pulp fibres are therefore thin and flexible, with an ability to form many kinds of strong bonds in the paper. Södra Black also produces a paper with high density, and a smooth and even surface. This pulp is also easy to process, which improves the energy efficiency of paper production.

*End-products:* facial tissues, kitchen paper, sterile paper, labels

**Södra Gold**
The raw material in Södra Gold is hardwood, which has shorter fibres than softwood. The advantages of short fibres is that they produce paper sheets with good formation, high strength, density and Z-strength. In hygiene products, this pulp produces a soft sheet.

*End-products:* outer layer of cardboard, fine paper, toilet paper and facial tissues

**Södra Blue**
Our Södra Blue pulp is made from several different types of spruce and pine. This mix of raw materials produces a pulp that is ideal for paper requiring high tensile strength, but also a fine structure and surface.

*End-products:* fine paper, printer paper, coloured paper, toilet paper

**TEXTILE PULP**

**Södra Purple**
Södra Purple is one of our textile pulps. The raw material is mostly birch, but beech and aspen are also used. Södra Purple is ideal for the viscose process, where the most common fibre is viscose.

*End-products:* clothing, upholstery fabric, sponge cloths or wet wipes made from viscose

**Södra Orange**
Södra Orange is ideal for the lyocell process and the production of lyocell fibres, which are the third generation of cellulose fibres.

*End-products:* clothing, bedding textiles or duvets based on lyocell
You meet Södra every day

Every year, Södra cultivates almost 26 million saplings to be planted in Swedish forests for harvesting some 60-90 years later. Södra Cell does not produce paper, only sulphate pulp. Most of this pulp is sold to European paper mills, but also to customers outside Europe.

The paper pulp is processed by our customers, and used to make coffee filters, toilet paper, newspapers, packaging and much more. Textile pulp can be used to make viscose or lyocell.
From plant to product

The forest forms the basis of Södra’s operations. Most forest raw material is used in Södra’s mills for further processing into pulp, construction timber and interior wood, while the rest is sold externally.

The illustration is based on figures from 2015

PLANT SALES
33 million saplings

HARVESTING CONTRACTED BY SÖDRA
7.7 million m³sub*

WOOD DELIVERIES FROM MEMBERS
1.7 million m³sub

EXTERNAL SALES:
Saw logs: 0.9 million m³sub
Biofuel: 1.9 million m³sub

80% of the wood raw material used by Södra’s mills comes from its members’ forests.

RAW MATERIAL FOR OTHER SUPPLIERS
Pulpwood: 1.0 million m³sub, of which imported: 0.5 million m³sub and centrally purchased 0.5 million m³sub
Sawmill chips: 0.8 million m³sub
* m³sub = solid under bark
Södra also includes Trivselhus, one of the leading timber house producers in Sweden, and the Södra Wood business area includes the production of interior wood products such as moulding, panelling, flooring and glue boards.

** Deliveries from Södra’s mills:**

- **Textile pulp**: 0.12 million tonnes
- **Hardwood sulphate pulp**: 0.17 million tonnes
- **Softwood sulphate pulp**: 1.2 million tonnes
- **Sawn timber**: 2.0 million m³

**Deliveries of green electricity**
Södra is more than self-sufficient in terms of electricity. The electricity generated is approximately equal to that consumed by a city the size of Malmö. The surplus green electricity is delivered to the open market.

**District heating from the mills**
Södra delivers substantial amounts of district heating to the communities around its pulp mills and sawmills. Deliveries correspond to the heating requirements of 20,000 homes.

**Södra also includes Trivselhus,** one of the leading timber house producers in Sweden, and the Södra Wood business area includes the production of interior wood products such as moulding, panelling, flooring and glue boards.
Green energy generation

By using green energy products from Södra, we are all helping to protect the environment and preserve the climate for future generations. All of the energy products sold by Södra are derived from the forest, and are 100 percent natural and renewable.

Södra offers a range of energy products to suit customers with different needs. Production at the pulp mills generates enough electricity to power the mills, and the surplus provides nearby communities with increasing amounts of green electricity and district heating.

The growing reliance on district heating from Södra is reducing emissions of greenhouse gases, since more than 99 percent of the energy from Södra is derived from biofuels.

The district heating network is mainly heated by residual heat from this process.

Södra is one of the largest producers of green electricity that is eligible for green electricity certificates in Sweden. One electricity certificate is equivalent to one MWh (1000 kWh) of electricity generated from renewable energy sources, such as biofuel.

The pulp mills also supply other types of biofuel products, such as tall oil, bark and pellets. Tall oil is used to produce biodiesel, which can replace petrodiesel in most diesel engines.

Södra has also wind turbines adjacent to the pulp mills, and on land owned by members.
Södra Cell and sustainability

Sustainability permeates all of Södra’s operations, from seedling to finished product. The wood raw material from members’ responsibly managed forests is a unique resource. Not only does it form part of a sustainable ecosystem, it is also 100 percent renewable, recyclable and biodegradable.

All grades of pulp from Södra’s mills are approved for use in paper products carrying the Swan or EU ecolabel. Further more Södra Cell has both FSC® and PEFC™ Chain of Custody certification. Customers can choose between FSC and PEFC-certified pulp. These certification and business management systems guarantee that the products maintain high quality from a sustainability perspective.

At Mönsterås and Värö, Södra has combined its pulp and sawmills. A combined plant increases energy efficiency and reduces transportation.
Södra Innovation and New Business

At Södra, research and development is a key part of the process to identify new business opportunities that ultimately benefit both new and existing customers. Södra Innovation and New Business is a staff function that supports the Södra Group’s three business areas (Cell, Wood and Skog), and serves as a centre of expertise for Södra’s customers. Södra Innovation and New Business is based at Södra’s Värö plant, outside Varberg in Halland.

In this research and development, and in the business development activities conducted by Södra Innovation and New Business, we work closely with our customers, colleges and universities. Södra Innovation is proud of its state-of-the-art laboratory. Laboratory technicians, researchers and business developers work together to produce the materials of the future from our Swedish wood raw material, including DuraPulp, textile pulp or lignin-based carbon fibre.

With the forest as a renewable, certified raw material, we have the right conditions to meet the demands of our customers in a climate-friendly manner. Södra is leading the way to a greener future!
Södra offers a wide variety of challenging and rewarding jobs. We are a modern workplace and offer many different career opportunities. Our employees range from forest wardens, forest officers, machine operators, engineers and technicians to marketers, transport managers, lawyers and drivers.

Södra is a stimulating workplace with a corporate culture of respect for individual differences. Our success is based on the skills, creativity and innovation of each employee.

We take a long-term approach and build value-creating relationships together, in a fantastic ecosystem that can be summed up in one word: Södra.