

A close-up photograph of several pink roses in various stages of bloom, set against a dark, blurred background. The roses are the central focus, with their delicate petals and buds clearly visible.

Queen[®] Grows Greener

Sustainability Report

Queen[®]

SUSTAINABILITY

Our responsibility

At Queen®, we do our utmost to minimize the impact of our production activities on the environment. For three generations, we have prioritized environmental responsibility and will continue to do so for generations to come. Over the years, we have optimized our operations across production, genetics, packaging and more. We are continuously developing improved and sustainable solutions throughout our business practices.

Our environmental improvements have been documented monthly since 2000, and we are proud to have earned the MPS-A, MPS-GAP, and MPS-SQ certifications every year since then - as have our closest partners. We will continue to optimize our sustainability practices and chose partners with the same ambitions.

It comes naturally to focus on and prioritize the UN Global Goals 12 and 15 - responsible consumption and production, and protection and restoration of ecosystems. Strategically, we work to reduce our ecological footprint by changing the way we produce and consume resources, both in our daily operations and long term.

Our Queen Grows Greener report is not only a reference work showcasing our sustainable initiatives. It is a report about our dedication and continuous development in this field. We always strive to be first movers and believe that a future-proof plant production requires strong investments and outstanding development with a focus on sustainability throughout the entire supply chain.

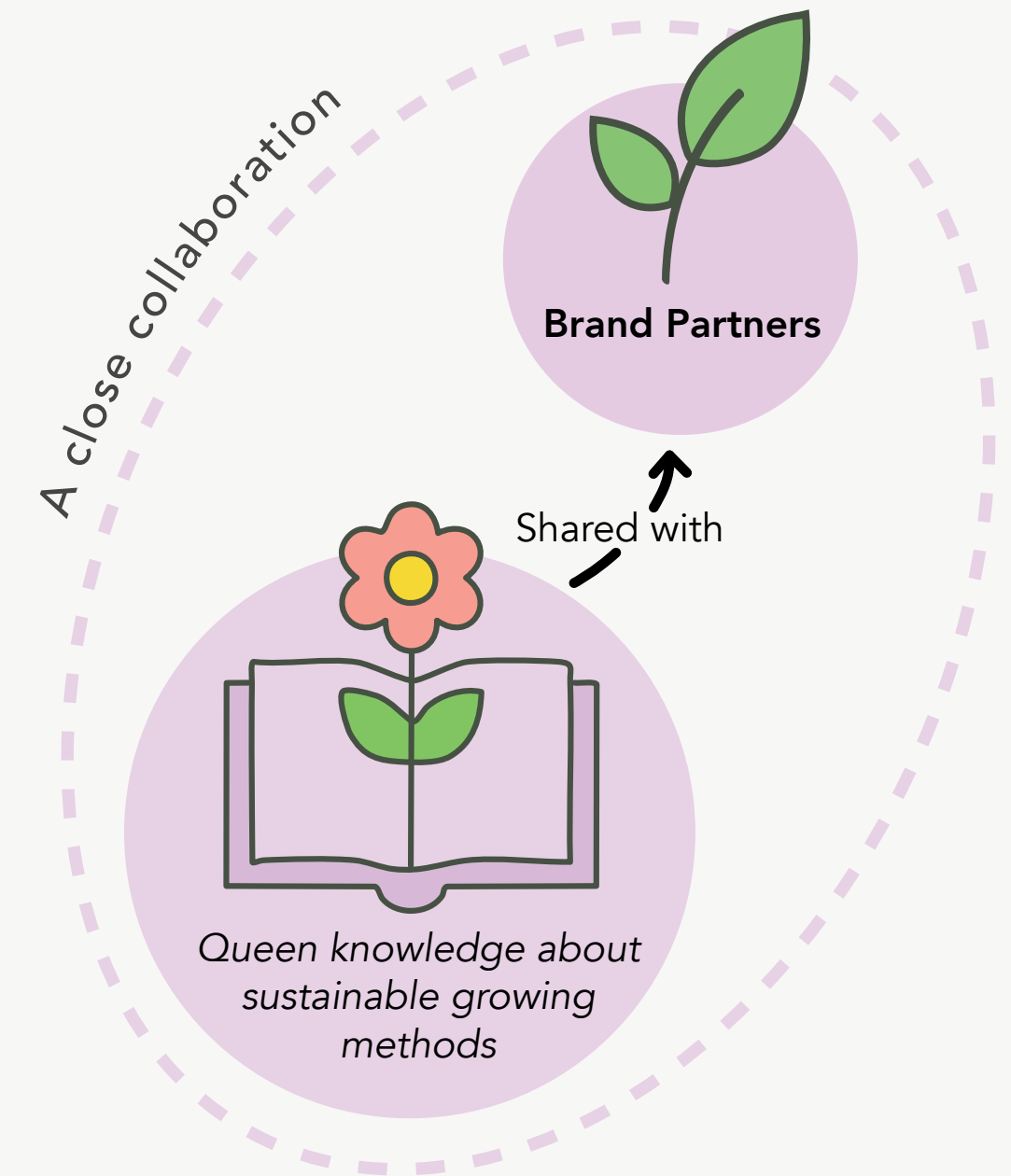
Frands Jepsen, CEO at Queen®



Sharing knowledge with the entire Queen-group

We believe the journey towards a greener future begins with genetics. Here we develop strong, naturally compact, and long-lasting plants that require fewer resources in production and result in less waste and more flowering joy.

Everything we develop and learn is made available to our Brand Partners - from genetics to production experience. This enables them to offer customers plants that are not only beautiful and long-lasting but also produced more sustainable.



To make every day more beautiful
with sustainable, long-lasting plants
and flowers, meeting the demand
of modern consumers.

OUR VISION

Queen®
flowers

QUEEN GROWS GREENER

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Queen[®]

Grows Greener

At Queen, we continuously invest in **sustainability and efficiency to ensure that we remain a competitive and reliable partner for the future.** Our focus on smart energy solutions, reduced resource use, and flexible production methods makes our business both greener and stronger. We are not afraid to be first-movers and challenge the industry with unique genetics and a customer-oriented service.

At the same time, our genetics, production, and marketing ensure that Queen Kalanchoe stands out as a true premium product. With unique varieties, uncompromising quality, and an inspiring flowering universe, **we deliver products that exceed consumer expectations and create lasting value for our retail partners.**



The market's
most tested
genetics

Genetics

We breed ethylene-tolerant plants that stay fresh longer and reduce waste. With the rol-gene we create naturally compact plants, lowering the need for growth regulators. We also screen for fungal resistance, resulting in stronger genetics that require fewer chemicals in production.

Climate: Reduced use of chemicals and growth regulators, resulting in a more sustainable production.

Retail: Plants with longer shelf life, lower waste in-store, and less dependency on chemicals.

Consumer: Naturally compact, healthy plants that last longer and thrive at home.



We are
first-movers

Chemicals

As the first within the kalanchoe production we have introduced biological pest control with predatory wasps and other biological pest controls, resulting in a reduction of chemical pesticides by 90%, and only using chemicals allowed in open nurseries.

Climate: Reduced artificial inputs and healthier ecosystems.

Retail: Products with a stronger green profile through a supplier who aims to be first mover in reducing chemicals in the industry.

Consumer: More natural plants in the home.



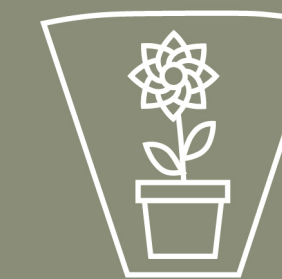
Growing medium

We have reduced our use of peat by 30% and are working on solutions and following market trends to eliminate it in the future. By 2030 we aim to be peat-free.

Climate: CO₂ reduction by phasing out peat.

Retail: Documented CO₂ improvements for sustainability reporting.

Consumer: A more sustainable choice.



5 mio. DKK
2025/26

Packaging

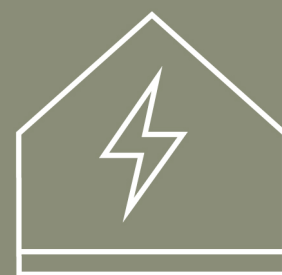
We have introduced FSC-certified paper sleeves, PCR pots and trays, and are moving towards a 100% recycled packaging. We are also implementing a new packaging machine and logistics system in our greenhouse that increases efficiency while still offering unique varieties and flexible solutions for our customers.

Climate: Less plastic waste, more recycling, and a more efficient process.

Retail: Great flexibility in assortment and packaging, we will always offer an exclusive assortment and a wide range of sleeves and trays, while scaling up effectiveness.

Consumer: Premium products in sustainable packaging.

15 mio. DKK
invested in
2024/25



8 mio. DKK
2025/26

Electricity

We have replaced 80% of our lighting with LED and will in 2026 move to 100% LED. We are building infrastructure that allows us to shift electricity consumption both internally and to the transformer station to balancing the grid. This makes our energy consumption more efficient, flexible, and climate-friendly.

Climate: Reduced energy consumption, actively supporting the green transition.

Retail: Reliable supply and stable costs.

5 mio. DKK
invested in
2025



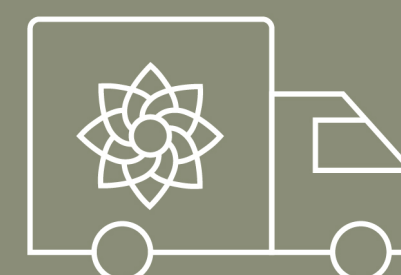
14 mio. DKK
2025/26

Heating & Energy

We use surplus heat and have upgraded our heat and power engines to quickly stabilise the electricity grid. We are adding an electric boiler, even more LED lighting and advanced controls to increase flexibility. Allowing us to balance the grid while keeping production stable and competitive.

Climate: Lower CO₂ footprint by using energy smarter and supporting grid stability.

Retail: Stable and competitive production.



Transport

We use road trains that allow us to transport more plants per truck, making logistics 25% more efficient. Through our involvement in the flower logistic infrastructure, we actively support the transition to electrifying the industry.

Climate: Fewer trucks on the road and reduced CO₂ emissions.

Retail: Lower transport costs per plant.



B2B

We have developed ethylene-resistant plants, which reduce waste and improve sales, and we have implemented Queen Colour Space Management and colour barcodes in stores to enhance sales and reduce waste, by ensuring a relevant assortment based on sales data.

Climate: Less waste throughout the value chain.

Retail: 25% higher sales and 50% reduction of waste per m² at the shop level, resulting in higher margins. Colour barcodes also make the re-ordering process easier.

Consumer: More beautiful and fresh plants with longer shelf life.

25%
better sales

50%
less waste



Home

We have doubled the longevity of our plants since 1980, ensuring stronger and longer-lasting quality for consumers.

Climate: Less frequent replacement needed = reduced consumption and waste.

Retail: A product that differentiates itself with documented high durability.

Consumer: Plants that last twice as long as before, providing better value for money.

ELECTRIFICATION

Investing in the future of sustainable production

For the climate

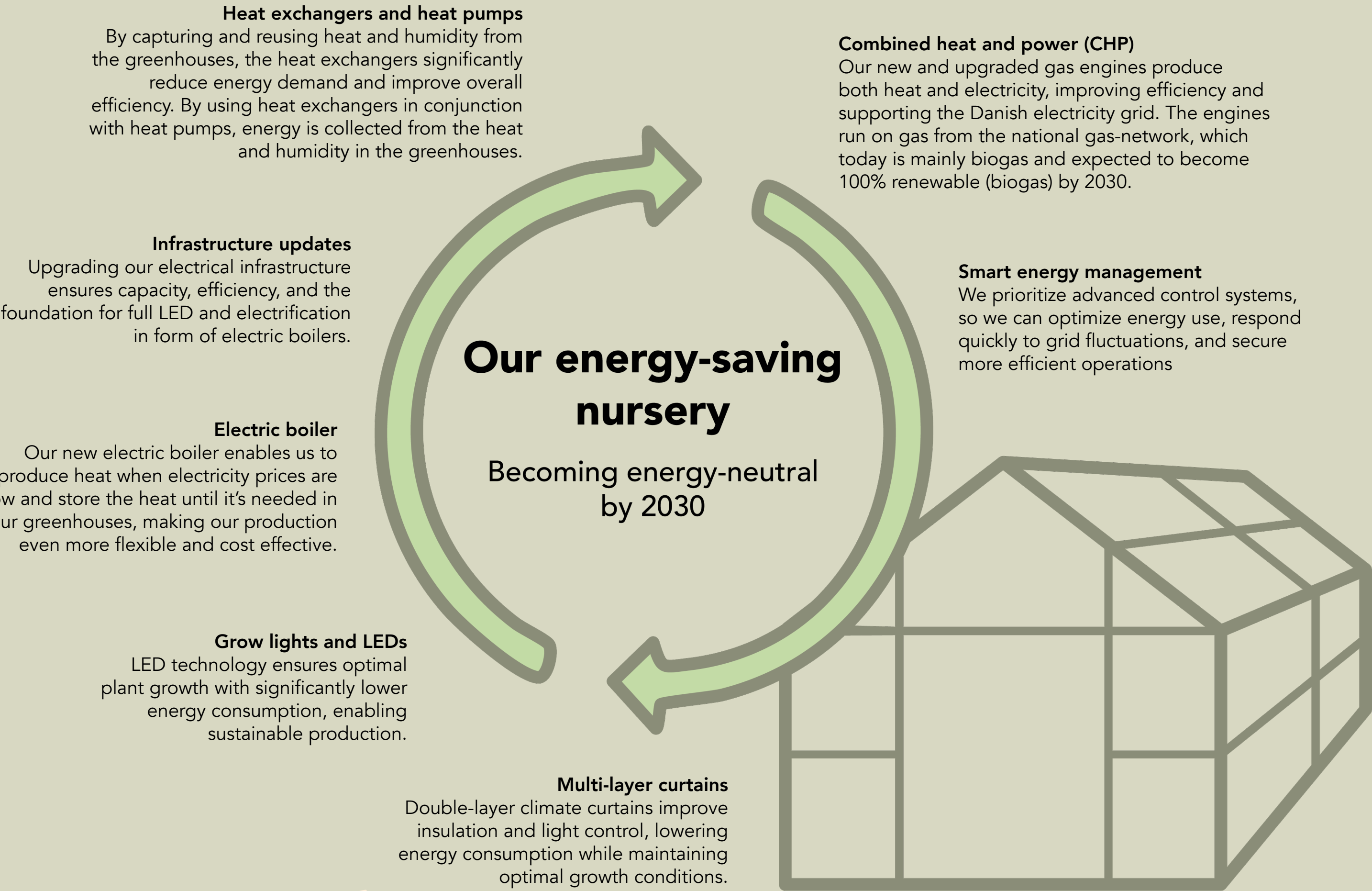
- Significant CO₂ reduction through smart energy use

For our retail partners

- Stable and competitive production costs

For consumers

- Sustainable plants produced with respect for nature with no compromise on beauty, quality or longevity



A FUTURE PROOFING INVESTMENT STRATEGY:

In 2024, 2025 and 2026, we are investing more than **40 million DKK** to strengthen our energy systems and accelerate electrification. Our key investments include upgrading heat pumps and control systems, installing an electric boiler, expanding LED lighting to 100%, and modernizing our electrical infrastructure to connect directly with the transformer station.

We make these investments to future-proof our production, lower our CO₂ footprint, and remain a competitive and reliable partner. By building flexible and energy-efficient greenhouses, we can balance the electricity grid, secure stable production costs, and continue to deliver sustainable plants without compromising on quality.



EXAMPLE: PRODUCING HEAT AND ENERGY EFFICIENTLY

We have invested in both new and upgraded gas engines at our combined heat and power plant (CHP) as well as a new electric boiler. This creates a flexible system which enables us to produce heat and electricity efficiently, use electricity when prices are low, and deliver electricity back to the grid when demand is high. This strengthens our energy independence and help stabilize the Danish electricity grid thus supporting the transition towards a more resilient, renewable energy system.

GENETICS

Innovative genetics for sustainable growth

At Queen, we believe **sustainability starts in the genetics**. By breeding naturally compact and resilient plants, we reduce the need for pesticides, thus creating greener solutions for climate, retail and consumers.

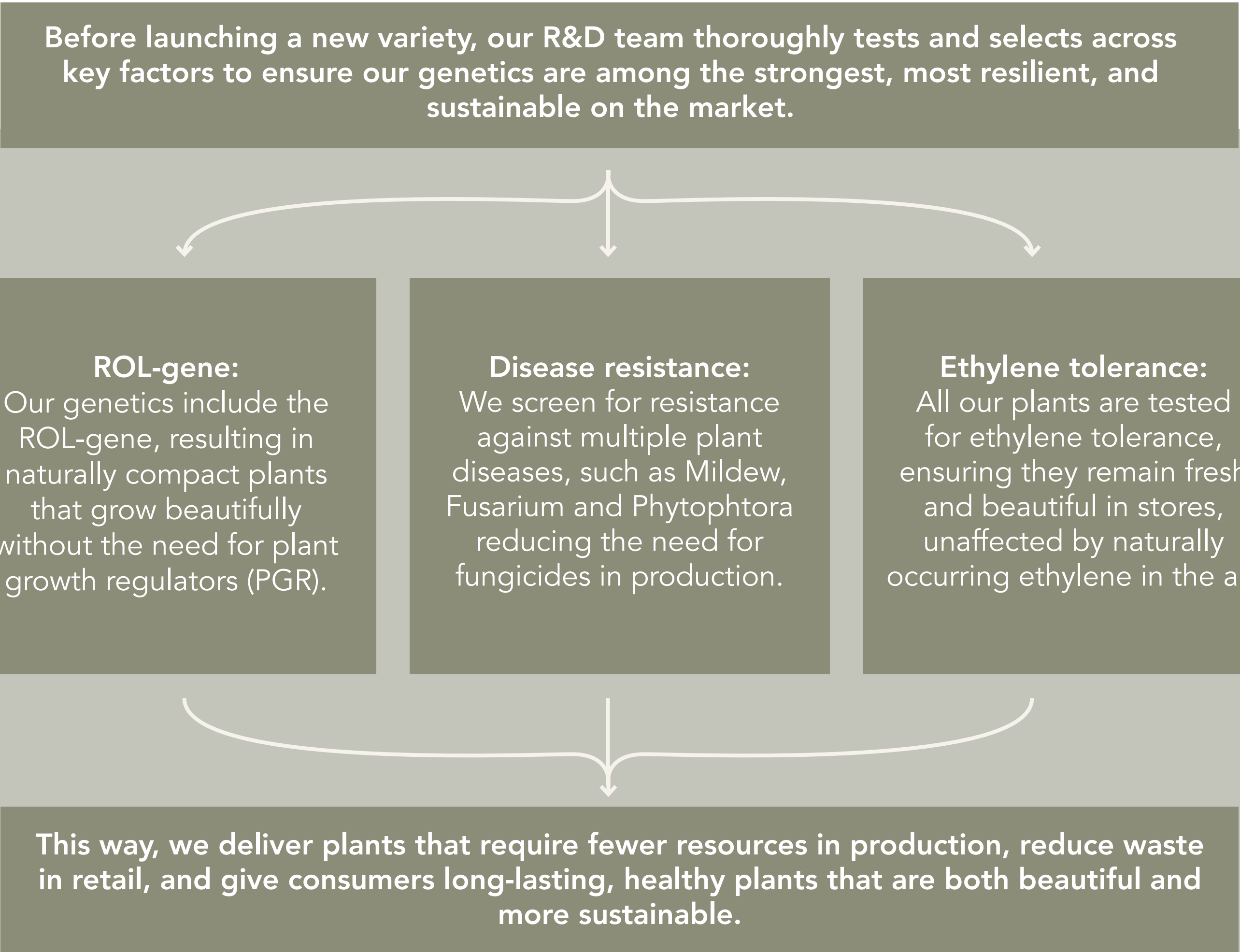
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Every new variety is the result of years of testing and selection. The ROL-gene makes our plants naturally compact, disease screening ensures strong resistance, and ethylene testing guarantees longevity - together, these factors define the high quality of our genetics.

Kai Lønne Nielsen
R&D Manager

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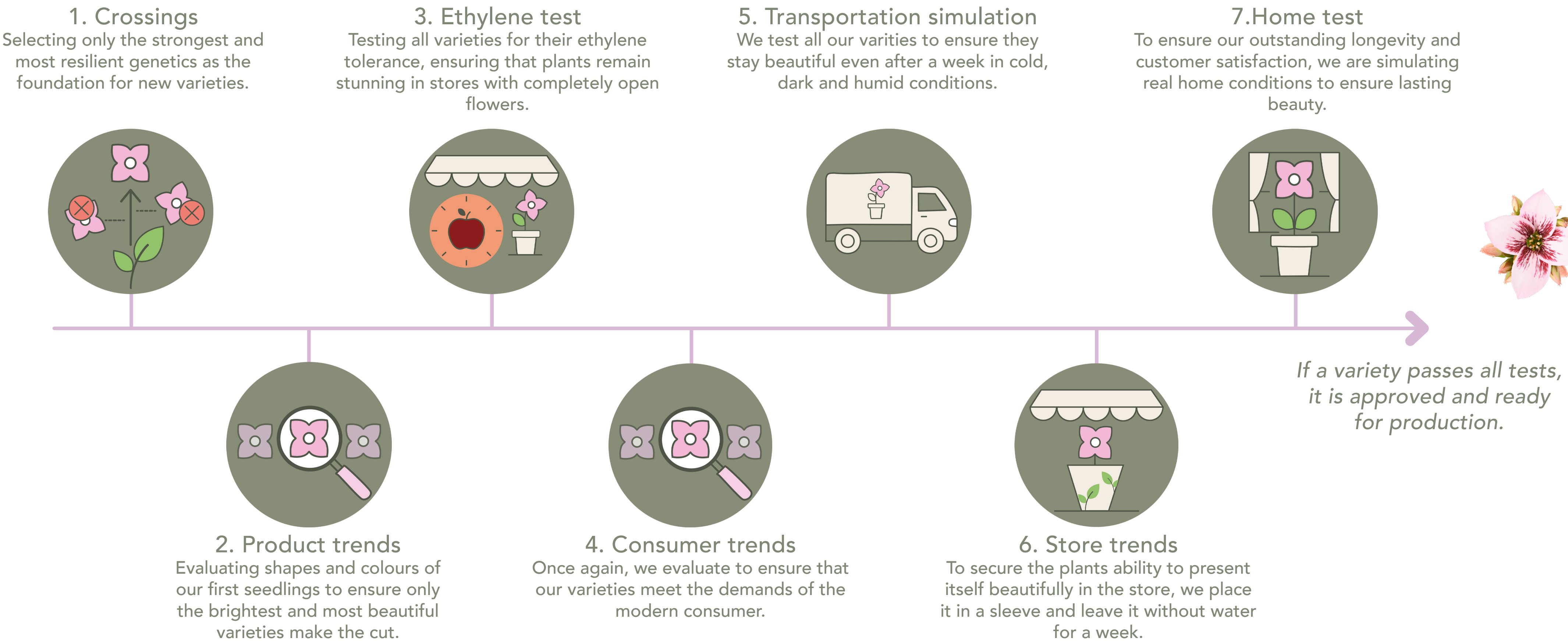
A look inside: Our R&D department



GENETICS

Thoroughly tested varieties

We subject all new potential varieties from our breeding to the following tests to ensure maximum quality, resulting in exceptional varieties, carefully selected for their ethylene tolerance, stunning colours, natural compactness and incredible longevity. Any variety that fails to meet our stringent standards is discarded.



PESTICIDES & BIOLOGICAL CONTROL

Working towards 100% production without PGR* in 2030

RESULT: 90% REDUCTION IN PESTICIDES

EXAMPLES OF BIOLOGICAL CONTROL

Our use of biological control is evolving, and we always adapt to the challenges and opportunities we encounter in our production. Below are examples of current measures:

Beneficial insects: Soil mites and parasitic wasps act as biological control, protecting the plants.

Beneficial fungi: Trichoderma harzianum in irrigation colonises roots and protects against harmful fungi.

Beneficial bacteria: Applied preventively to form a protective immune system around the plant’s roots and reduce the need for fungicides and pesticides.

Banker plants: Wheat with host aphids attract parasitic wasps that naturally suppress pest populations.

QUEEN BIOPRODUCTION

Own bio-setup: Since 2018 our business unit Queen Türkiye and EWH BioProduction have been developing biological control and beneficials.

Primary purpose: To provide biological control to our own production.

Long term goal: Aim at supplying natural products to local growers within the flower- and food industry worldwide.

PESTICIDES

We are only using pesticides allowed in “open greenhouses” and are prioritizing to reduce our use of pesticides significantly during the coming years.

Strong genetics: We test, develop, and select varieties for natural resistance to diseases such as Mildew, Fusarium and Phytophthora - reducing the need for pesticides from the start.

Skilled, adaptable production: Our teams continuously integrate biological solutions and adapt methods to keep pesticide use at a minimum in our production.

Proven results: We have already reduced pesticide use by 90% since 2010, and only apply substances permitted in open greenhouses.

Forward-looking goal: By 2030, we aim to be completely pesticide-free, relying on strong genetics and biological control as the backbone of plant protection.

Impact: Lower environmental load, stronger green profile for retail partners and more natural plants for consumers.

Pesticides: Strategy and ambitions

| | 2025 | 2026 | 2027 | 2030 |
|---|------|------|------|------|
| Production without plant growth regulator (PGR) | 50% | 60% | 75% | 100% |
| Production without any pesticides use | 25% | 35% | 50% | 75% |

*PGR stands for ‘plant growth regulator’

PESTICIDES & BIOLOGICAL CONTROL

Crops grown without PGR

When introducing new crops, we prioritize varieties that do not require PGR (plant growth regulators) - or have the potential to be produced more sustainable. Our goal is to breed plants that naturally grow compact through rol-transformation and extraordinary breeding, significantly reducing the need for growth regulators.

Within Kalanchoe, we have already taken major steps - introducing varieties with no need for PGR, with more to come.

With each new generation, our genetics become stronger, healthier, and more sustainable - bringing us closer to a completely pesticide-free production.

Examples of Queen
crops that are grown
without PGR

Euphorbia

Our Euphorbia Tiara™ and Euphorbia Jewel™ series are our own breeding. Known for its beautiful large flowers and extreme longevity, this product sets us aside from the competition by being an extraordinary development.

Besides their unique look, our Euphorbia varieties are naturally compact and resilient - they don't need any spraying or treatment with PGR. Through years of dedicated breeding, we've developed genetics that deliver the right growth habit and strong resistance without pesticides, resulting in a cleaner, more sustainable product. For consumers, it means long-lasting plants that thrive naturally.



Hebe Kiwi™

Our Hebe Kiwi™ is another extraordinary plant. Known for attracting insects and butterflies, it thrives outdoors and features beautiful, deep-coloured flower spikes.

Our Hebe Kiwi also stands out for its exceptional natural strength. Unlike many other varieties on the market, it requires no PGR and shows remarkable resistance to fungal diseases that usually affect this crop-type.

The result is a naturally strong and sustainable plant that performs beautifully from grower to garden, with less waste, fewer treatments, and consistently high quality for both retailers and consumers.



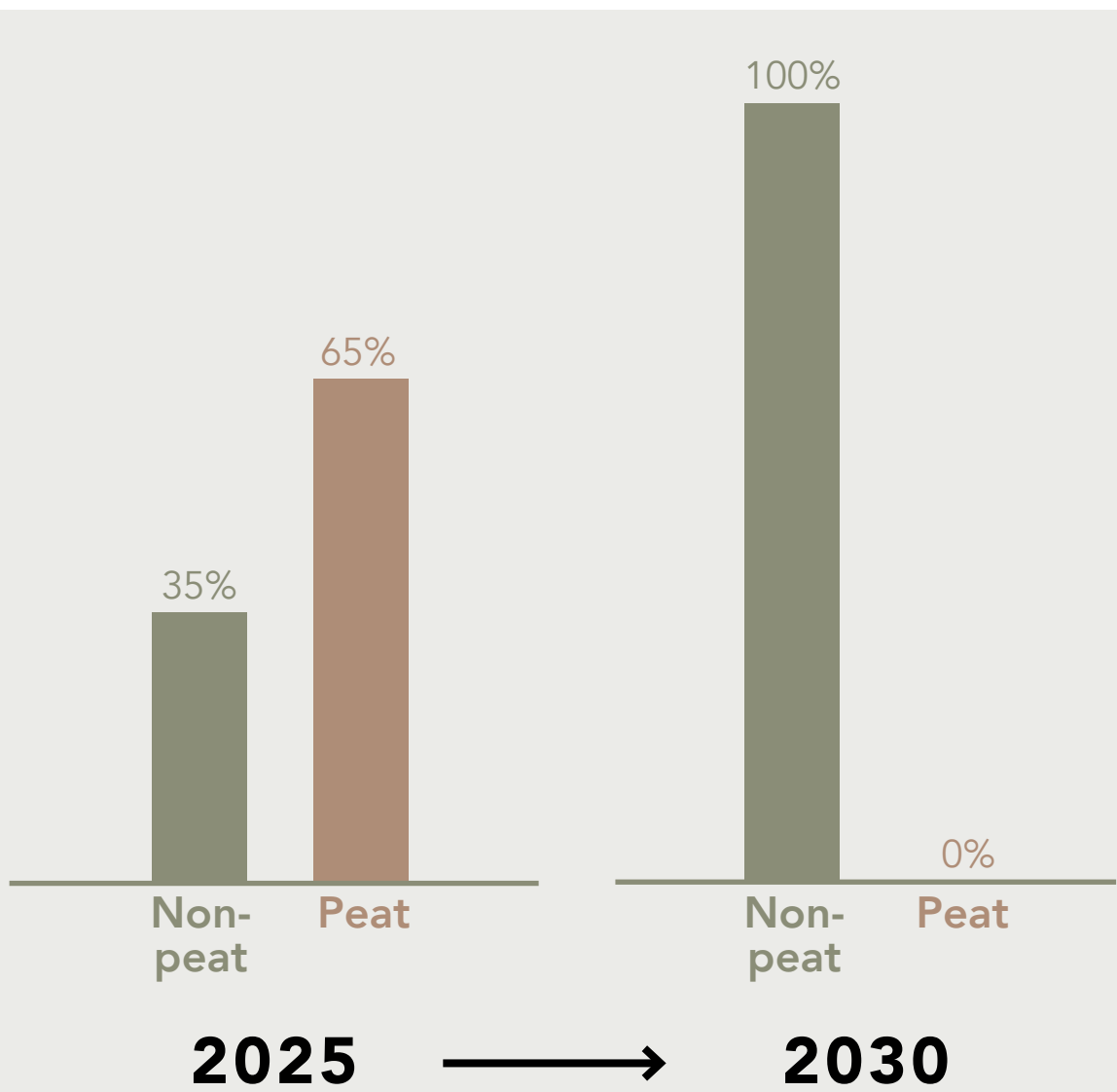
SPAGNUM PEAT REDUCTION

A long-term commitment through testing

A reduction of sphagnum peat is a high priority at Queen. We aim to decrease our use of sphagnum peat and will continuously work with reducing peat and replace it with more sustainable alternatives, without compromising on quality.

We emphasise that our growing media:

- Meet high quality standards
- Do not come from or exploits registered, protected areas and nature reserves
- From suppliers that work actively with restoration projects and re-establishing the nature after harvest
- Qualified as growing media



Working towards a peat-free production

At Queen, we continuously work to reduce the use of sphagnum peat in our production without compromising on quality. It's a long-term commitment that requires research, patience, and close collaboration with our partners.

Our R&D Manager Kai Lønne Nielsen who leads several of our trials, explains that there is not a ready solution to the problem yet, but we are leading the way by testing several solutions: "Right now (2025), we're testing five different types of growing media with reduced peat content. Four of them look promising, and one mix with 50% less peat is performing well."

Partnerships play an important role in the process, and we prioritize working with partners who share our high ambitions. "We collaborate with Pindstrup to test alternative blends and take part in research projects such as Biosubstrate 2.0 and Biosubstrate

Pro, where the goal is to reach 100% peat-free production. It's a long, but important process."

We are known for our innovative mindset and extensive testing - and we acknowledge that not every trial leads to success. "We have tested several alternatives to peat, some with more success than others. That's part of innovation; things take time when you're moving into new materials."

Still, our direction is clear and we are getting closer to our 2030 goal everyday: "We've launched many initiatives and collaborate closely with suppliers. Realistically, it will take a few more years, but our ambition remains the same - to be completely peat-free by 2030. Not all solutions are ready yet, but we're doing everything we can to get there." says Kai Lønne Nielsen.



WATER CONSUMPTION

Developing a system that reuses our water

At Queen, water is an important resource. By combining rainwater collection, advanced filters, and condensation systems inside our greenhouses, we ensure that the water is reused. This allows us to operate with 100% recirculation of irrigation water, while at the same time reducing waste, lowering costs, and protecting the environment.

Our **9,000 m³ rainwater tank** allows us to be self-sufficient

We collect rainwater from the greenhouse roofs.

We collect the water which evaporates and condenses on the inside of the glass in the greenhouse. The condensed water is reused.

We reuse all our water



The water the plants don't use flows back through sand filters and are reused for the next watering.

We water the plants by flooding the tables, and here they absorb as much water as they need, before it flows back to the system.



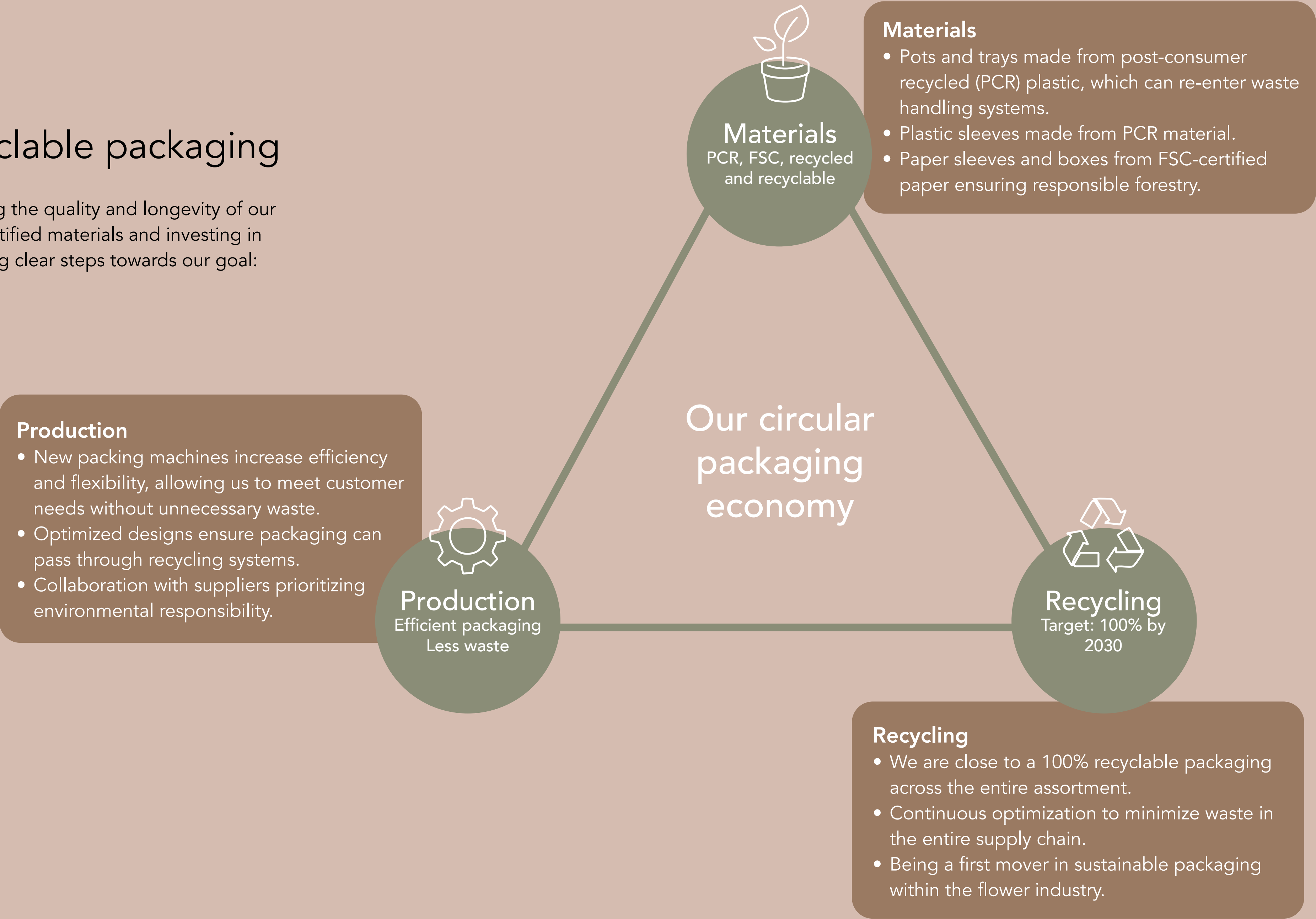
PACKAGING

Towards 100% recyclable packaging

Packaging plays a key role in protecting the quality and longevity of our plants. By introducing recycled and certified materials and investing in smarter packing solutions, we are taking clear steps towards our goal: 100% recyclable packaging by 2030.



Delicate Line: Our premium sleeves designed in 100% recycled plastic or paper.



MPS

Documenting our sustainable progress

At Queen, sustainability and business go hand in hand. Since 1998, we have documented our environmental performance every month through MPS - an international certification program that measures how sustainable and responsibly nurseries operate.

MPS-A

Environmental performance: Documenting consumption of energy, fertilizers and chemicals and ensuring continuous reductions.

MPS-GAP

Good agricultural practice: Confirming safe, sustainable and traceable production and high-quality standards.

MPS-SQ

Socially qualified: Ensuring fair working conditions, equality and a safe work environment across all Queen production sites.

FIND OUR MPS CERTIFICATES AT:

www.queenflowers.com/mps/

Our commitment

We aim to remain among the top-rated producers within MPS and continuously improve across all sustainability parameters, from resource use and waste reduction to employee well-being and safety.





With **Queen Grows Greener** it is apparent that our future is rooted in first-mover ambition - combining knowledge, technology, and responsibility to ensure that Queen remains a strong, sustainable, and inspiring partner for retailers and consumers.

Queen[®]