



THE MAIN OPPORTUNITIES AND CHALLENGES IN ORGANIC PROCESSING

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THE most
innovative
DAIRY
IN THE WORLD - FROM
FINLAND

**FINNISH DAIRY
FARMERS
FOUNDED VALIO
IN 1905**
to export butter.



FOR US —
milk is
Amazing

**DAIRY FARMERS
ARE STILL
VALIO'S OWNERS**

We pay out our profits
through dairy cooperatives
to 5100 Finnish farms.



INNOVATIVENESS
as
**A DRIVING
FORCE**

NOBEL PRIZE WINNING INNOVATIONS

The head of Valio's laboratories, A.I. Virtanen received the Nobel Prize in Chemistry in 1945. His legacy lives on at Valio. We use science to make food that improves everyday lives.



Valio Research Laboratories founded in 1917

"Only a country whose entire economy is based on science can achieve and retain first place in the economic battle between nations. The advancement of the dairy sector requires science as much as any other sector."

– Valio Board on founding the research laboratories

ORGANIC IN VALIO: SMALL ACTIONS THAT MATTER THE MOST



OUTSIDE ALL YEAR ROUND – All cows on organic farms graze outside in summer and exercise outside in winter. Grazing also promotes cow's health as well as the conservation of natural diversity.

ORGANIC NUTRITION – No pesticides or artificial fertilisers are used in growing feed for organic cows.

NATURAL INGREDIENTS – The milk, berries, fruit and oats in organic products are completely free of pesticides.

RENEWABLE PACKAGING MATERIALS – All out milk, yoghurt, juice and berry soup cartons are made from 100% plant-based material – even the caps.

FULLY RECYCLABLE – All Valio Luomu packages can be recycled.

GREAT AS THEY ARE – Valio Luomu products contain only essential additives or added sugar.

RENEWABLE ENERGY – Valio Luomu products are mostly manufactured with renewable energy. We are increasing renewable energy in our Luomu chain from the farm to the to the consumers home and eventual recycling of the packaging material.

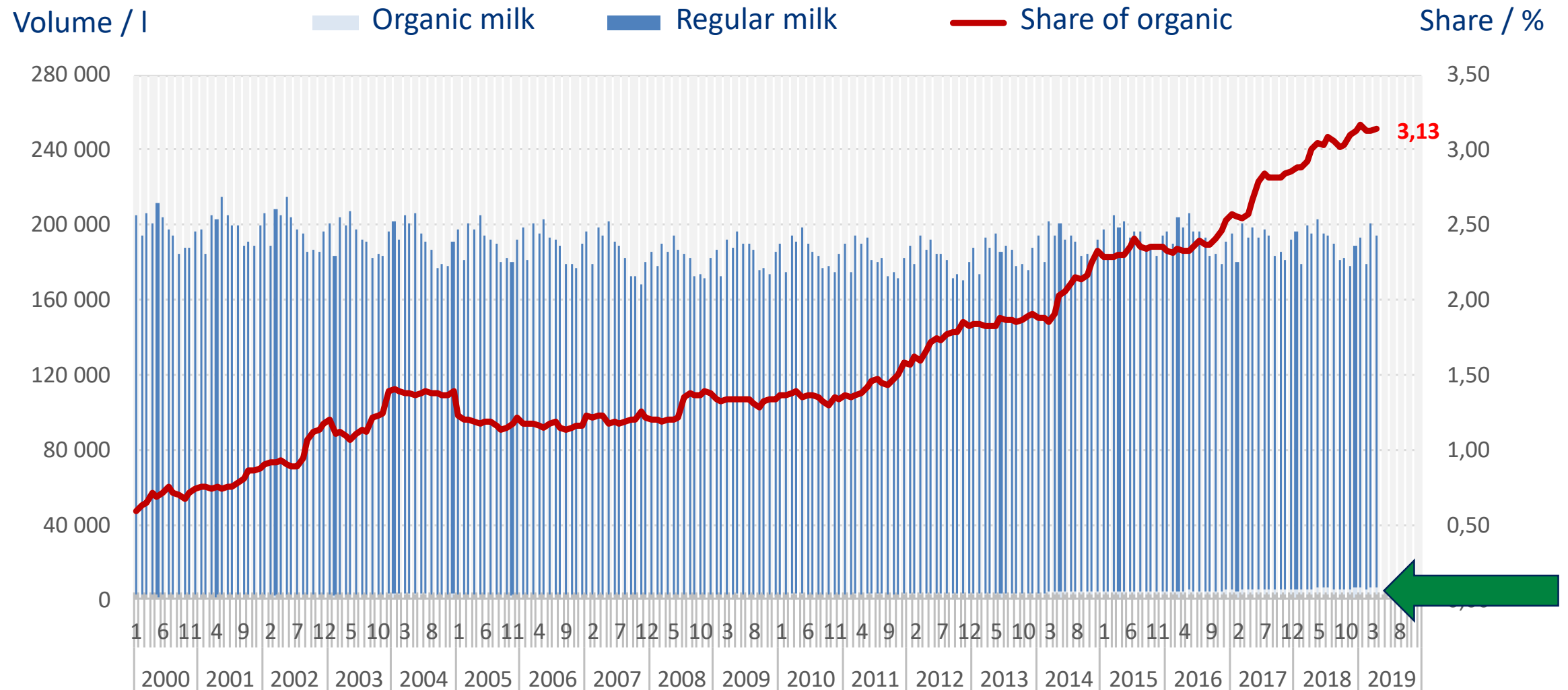
SMALL BIOGAS PLANTS - Organic farmers have small biogas plants on their farms, where they make biogas out of cow manure.

LBG MILK COLLECTION TRUCK - First liquid biogas (LBG) milk collection truck was adopted to collect Valio Luomu™ milk. Truck uses biogas, which is made from renewable energy.

The background of the slide is a close-up photograph of green clover leaves with white variegation. The leaves are in sharp focus in the foreground and become blurred towards the background.

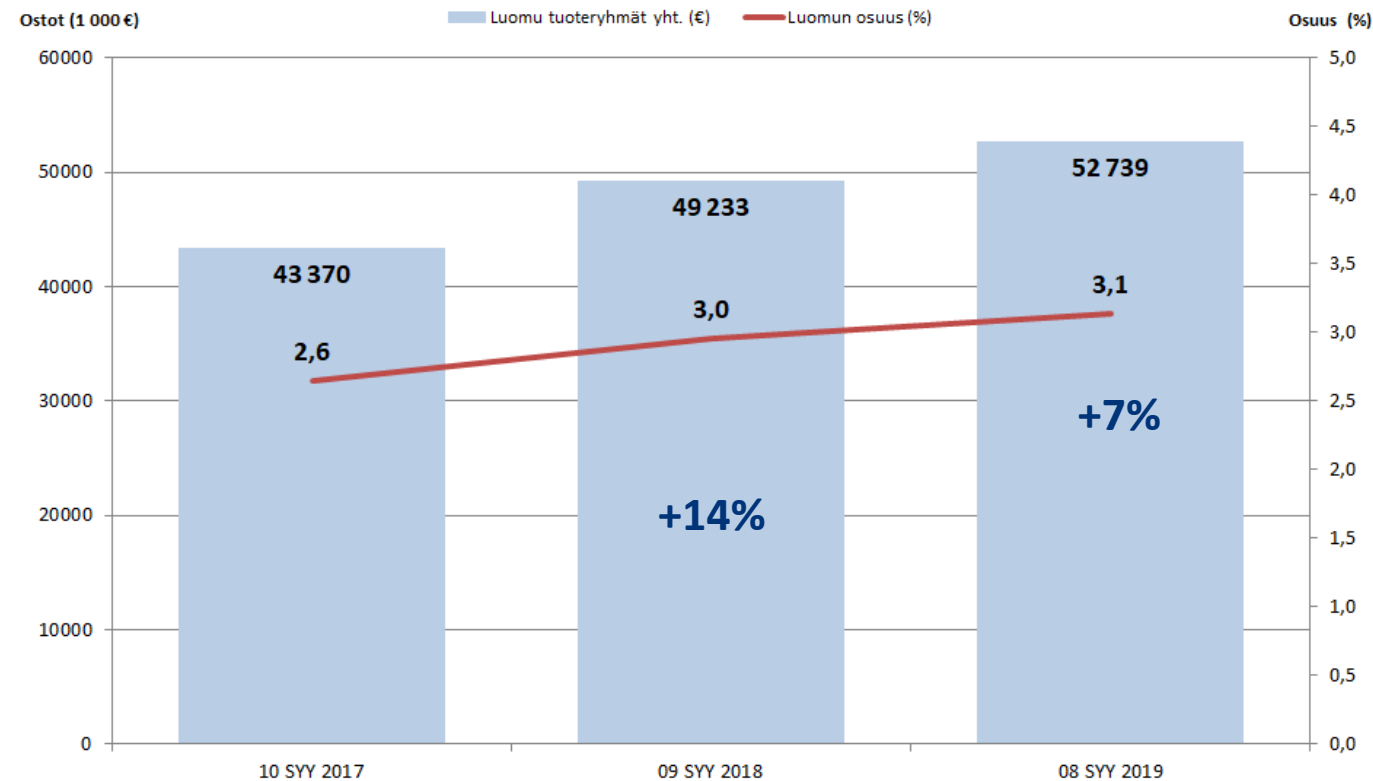
CHALLENGE #1: ORGANIC IS SMALL (BUT BEAUTIFUL)

ORGANIC RAW MILK 3% OF TOTAL



SHARE OF ORGANIC PURCHASES > 3% IN VALIO'S PRODUCT GROUPS

Luomutuotteiden osuus (€) tuoteryhmien ostoista
(Tuoretuotteet, juustot, rasvat, mehut ja marjakeitot)
Lähde: Nielsen Homescan, 52 viikkoa



MILK COLLECTION

Logistics
Timing
Volumes



MILK RECEPTION Separate (=small) silos for organic milk



CHALLENGE #2: PROCESSING

VALIO'S ORGANIC PRODUCTION

Oulu

Fresh dairy

Joensuu

Cheeses

Jyväskylä

Eila lactose-free milks

Seinäjoki

Fresh dairy, butter, spreads and powders

Riihimäki

Milks and creams

Turenki

Creams

Helsinki & Suonenjoki

Juices, berry soups and jams



 Cheeses

 Powders

 Fresh products

 Jams

 Juices

 Fats

PROCESSING
CIP / clean line
Separate
handling &
storing
Audits
Mass balance



CHALLENGE #3: RAW MATERIALS

**OTHER RAW
MATERIALS**
Regulations
Additives
Availability
Quality



The background of the slide is a close-up photograph of green clover leaves. The leaves are in sharp focus in the foreground, showing their characteristic three-lobed shape and light green color. The background is a soft, out-of-focus green, creating a natural and fresh aesthetic.

CHALLENGE #4: DIFFERENT REGULATIONS

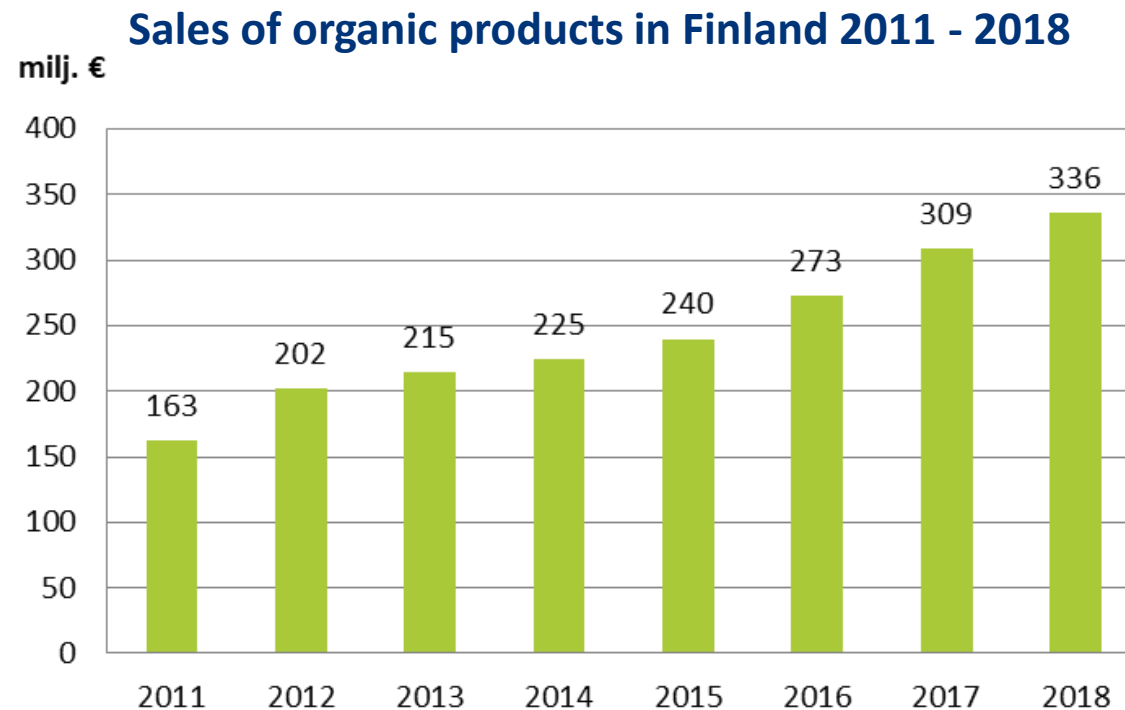
**REGULATORY
DIFFERENCIES
in different
markets
e.g. Vitamin D
addition to
milk
Sweden vs. EU**



The background of the image is a close-up, slightly blurred photograph of green clover leaves. The leaves are three-lobed and have some white variegation. The overall tone is a soft, natural green.

OPPORTUNITIES

ORGANIC IN FINLAND +9% IN 2018



Source: Pro Luomu

Organic market in Finland

Share of organic is expected to grow up to 10 % in the long term in Finland.

Total dairy market won't grow, but consumption will shift to organic products.



Purity
AND RESPECT
FOR
nature

60°N

PURE FINNISH NATURE
IS WHERE THE BEST MILK
IN THE WORLD
IS MADE

Our cows are among the healthiest in the world,
with zero traces of antibiotics in their milk.

Valio
luomu

EFFICIENT MILK COLLECTION



DOMESTIC WILD BERRIES



SMART INNOVATIONS, CATEGORY TRENDS, EVERYDAY PRODUCTS



More than 50 SKUs in Valio Luomu™ portfolio already

A wide-angle photograph of a lush green field with several cows grazing. In the background, there is a dense line of tall evergreen trees under a clear blue sky with a few wispy clouds. The sun is low on the horizon, creating a warm, golden light across the scene.

**SMALL EVERYDAY ACTIONS
HAVE A GREAT SIGNFIGANCE**



THANK YOU!