

An aerial photograph of a rural landscape at sunset. The sky is a mix of orange, yellow, and blue. In the foreground, a paved road curves through a field of dark, tilled soil. A small car is visible on the road. The middle ground shows a large, dark, rectangular field, possibly a recently plowed area. In the background, there are rolling green hills and a small cluster of houses with red roofs. The overall scene is peaceful and scenic.

CAPIGI – Crops and Data

Director Digital Crops, Jesper Riber

Amersfoort May 8, 2023

Once upon on a farm, to a collobarative industry



Enable Sustainable Farming



In the old days, the farmer relied on his own and other local farmers on knowledge. With help from the priest, the local schoolteachers, and other educated that went from town to town, knowledge was shared.

As agriculture became more specialized, there was a need for a common powerhouse of expert knowledge. Therefore, in 1971, the farmers' and homesteaders' associations joined forces in a joint superstructure: Det Faglige Landscenter.

Det Faglige Landscenter merged in 2015 with the Knowledge Center for Pig Production. Since then, SEGES has been both itself and part of Landbrug & Fødevarer.

On 1 January 2022, SEGES Innovation P/S was established.

SEGES
INNOVATION




Meet SEGES Innovation

We are a private, independent, non-profit research and development organisation

We are the leading agricultural knowledge and innovation centre in Denmark

We collect data and service Danish agriculture as market leader

We offer sustainable solutions for the agriculture and food sector of tomorrow



SEGES Innovation P/S is part of Agro Food Park in Aarhus
SEGES Innovation P/S has 530 employees

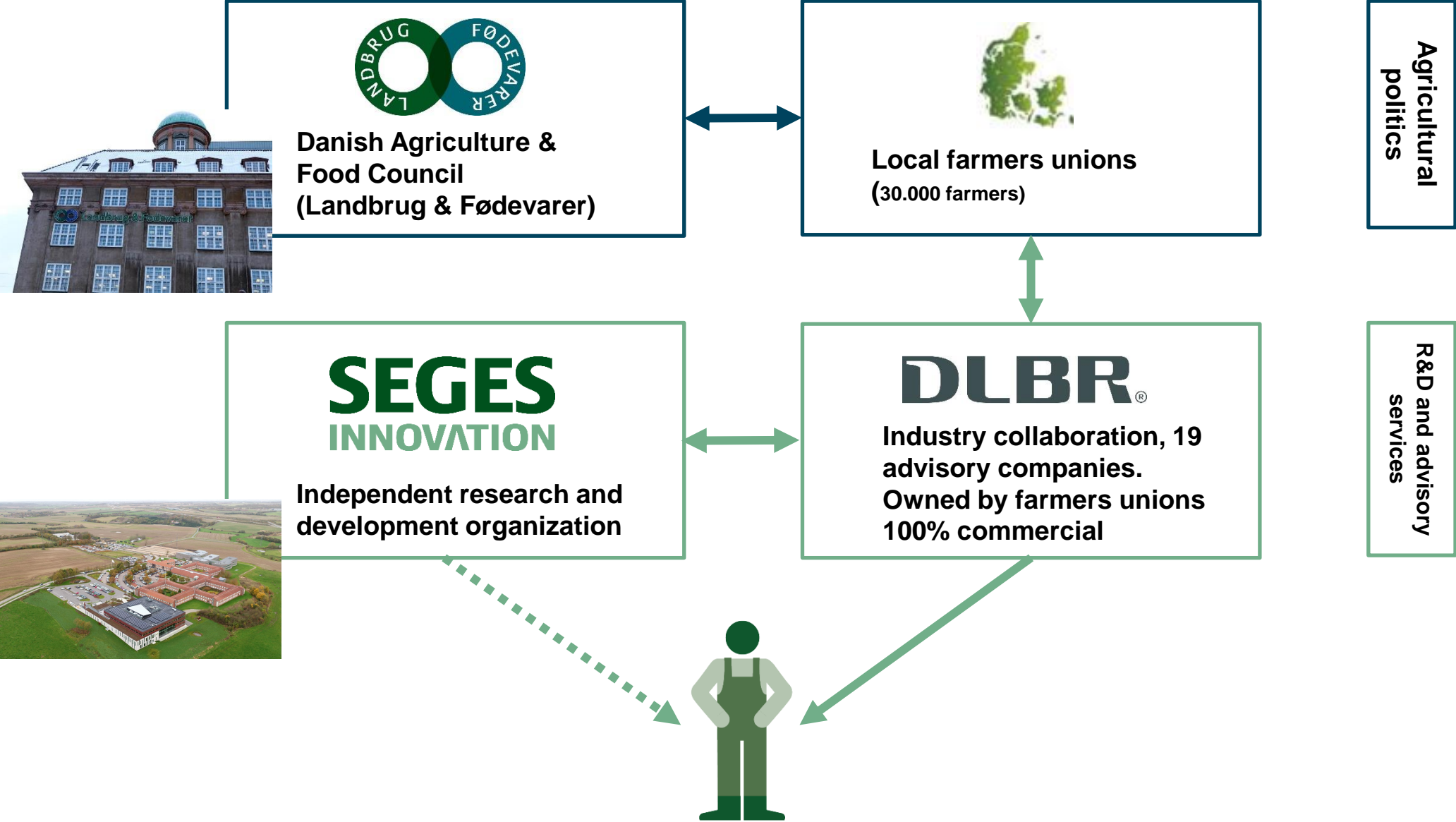
**AGRO
FOOD»
»PARK**

What is special in Denmark

- Long history of cooperation in agricultural sector - reaching big export markets
- Skilled farmers sharing and investing in knowledge
- High level research institutions
- Very high level of food security
- Own advisory service
- Own innovation center



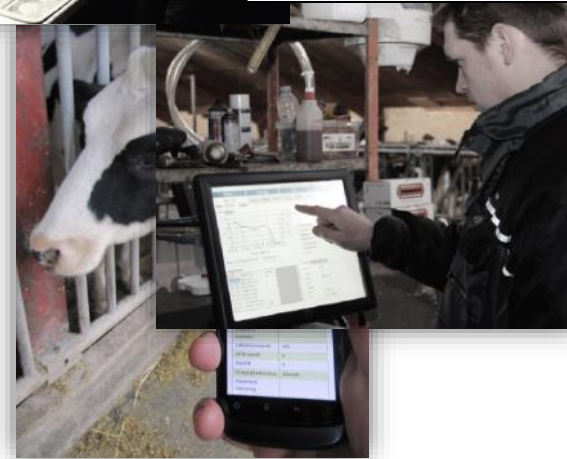
Politics, Innovation and Advisory Services



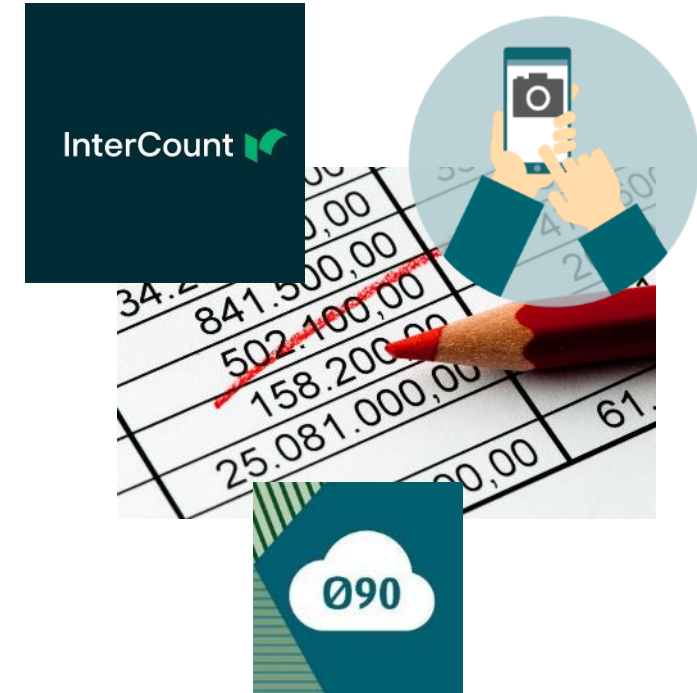
Introduction to SEGES Software – converting data and agricultural knowledge to digital solutions



Crops



Livestock



Accounting & Finance

The Crop Portfolio



FarmTracking

- The fieldworker



CropManager

- The farm manager and the owner



Mark Online

- The plant advisers
- The advanced farmer



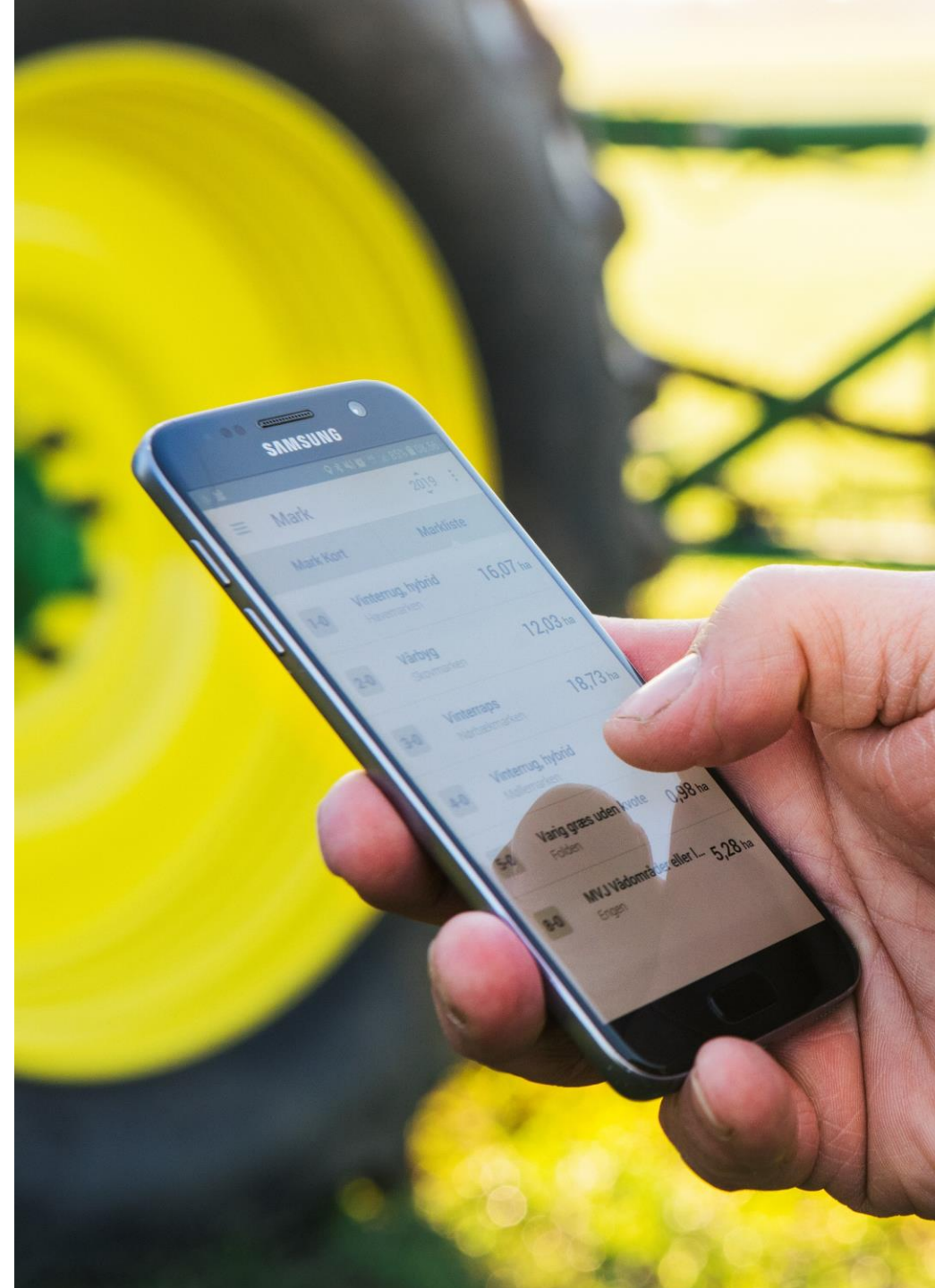
KemiTjek



FarmTime

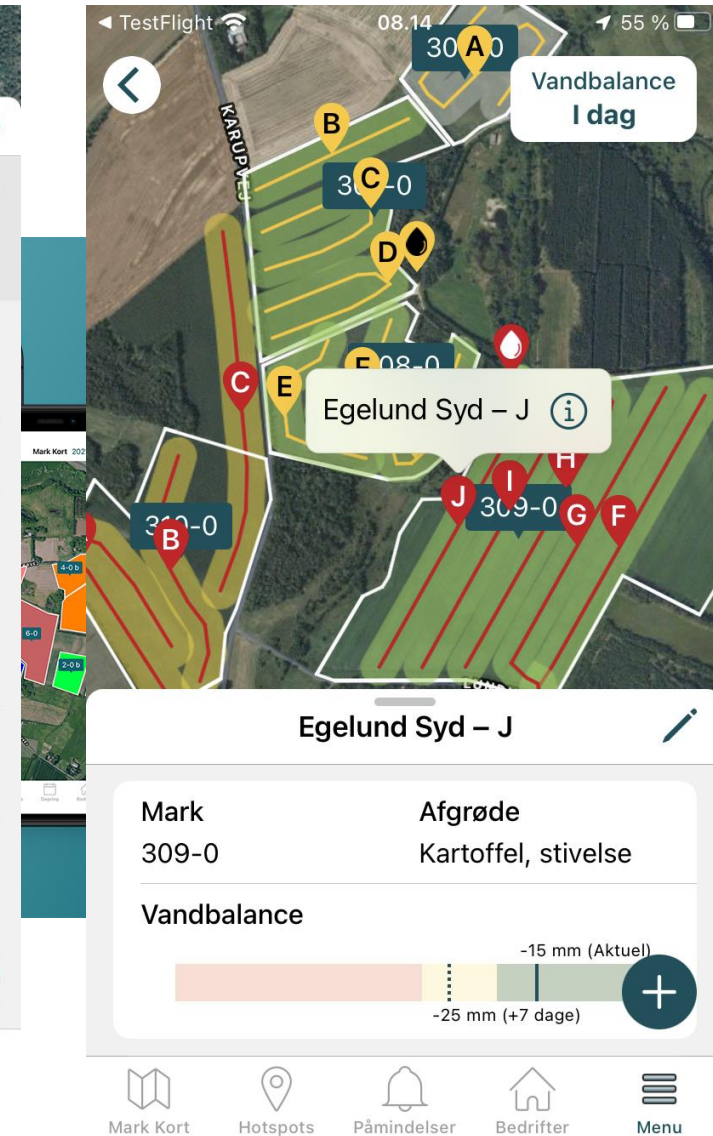
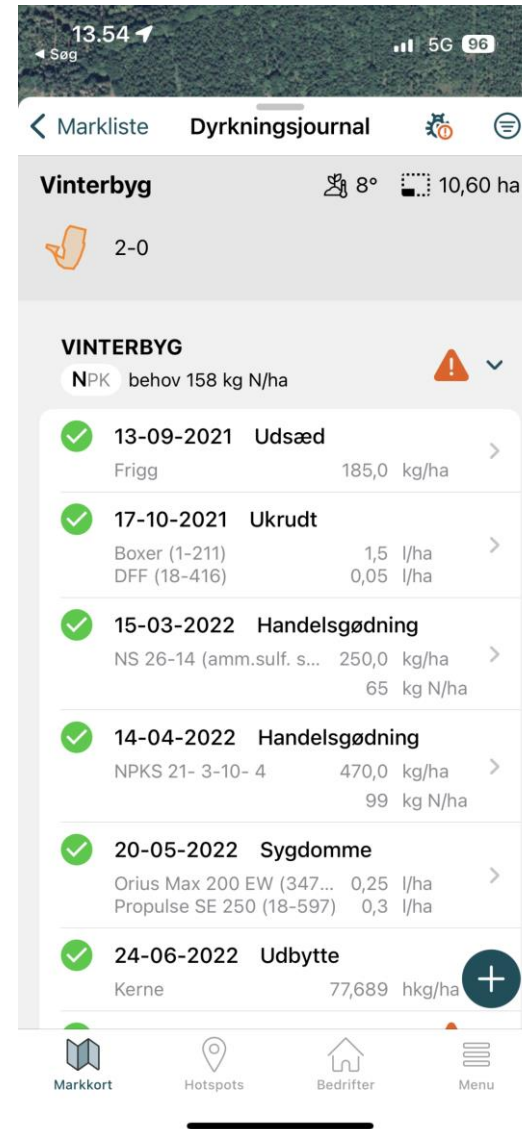


Biogas Online



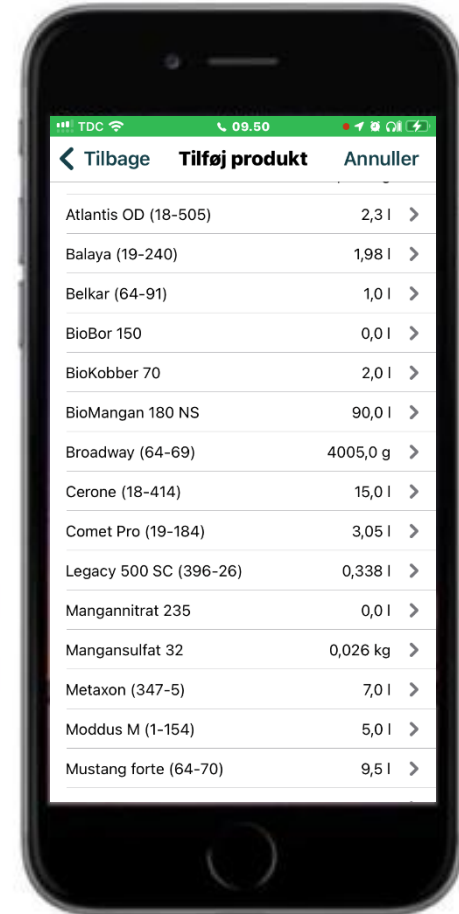
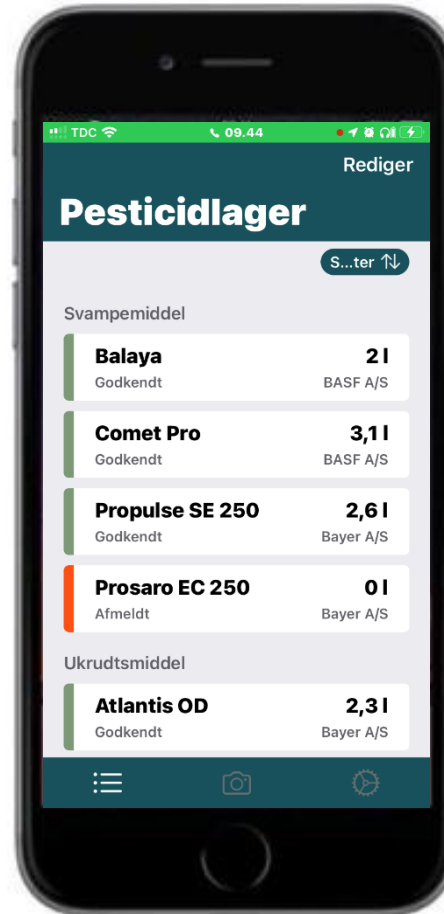
Adoption in Denmark

- FarmTracking application have nearly reached 1,5 mill Hectares
 - 4500 daily users
 - Documentation



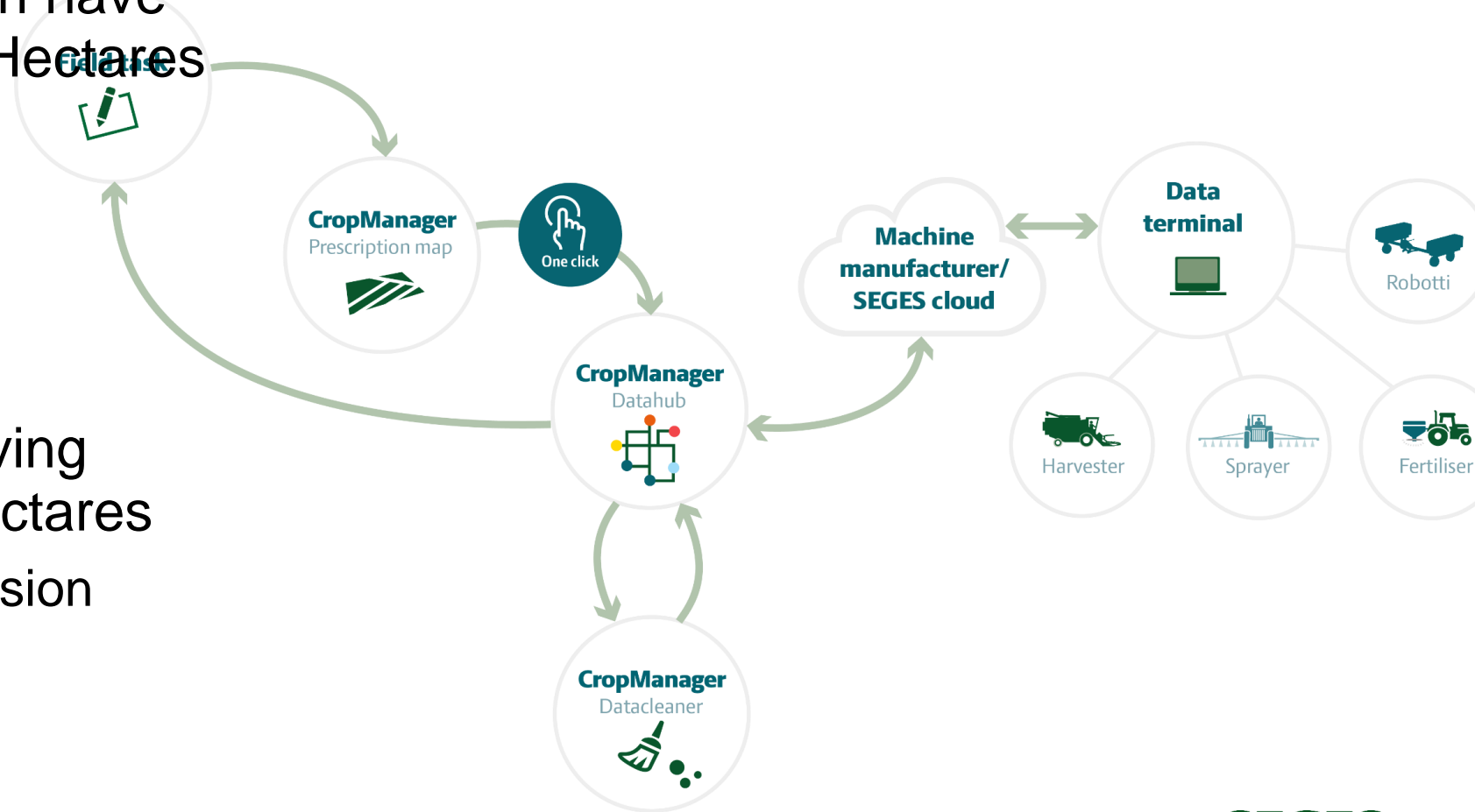
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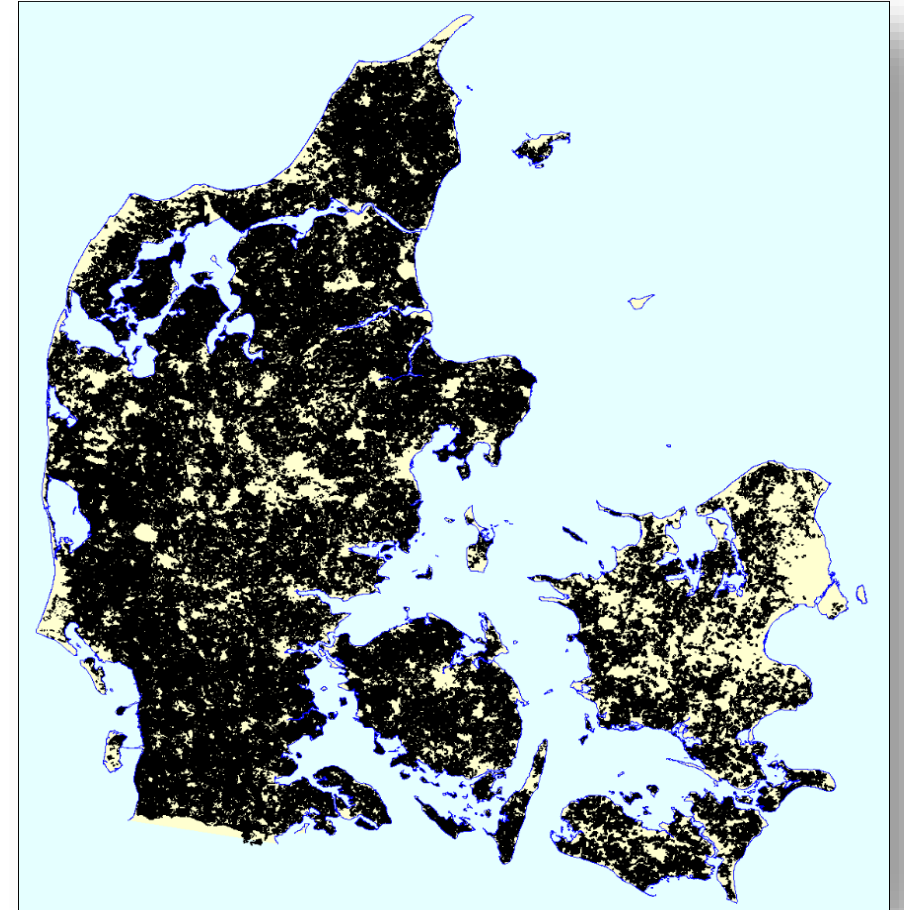
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 - Accelerated by the precision farming legislation



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- Crop advisers uses Mark Online covering 2,1 mill. Hectares
 - 500 Advisors uses the platform daily to help the farmer apply for EU subsidies and report to public authorities
 - Field, crop and fertilizer planning



Everything about the data

- Data from more than 1000 field trials each year
- Data from FarmTracking with 4500 daily users
- Data created and validated by 500 advisers
- Data communication with all major machine brands
- More than 100.000 soil samples conducted each year
- And much much more

FENDT



VALTRA



FÖDERTEKNIK



JOHN DEERE



**SEGES
INNOVATION**



SEGES

Driving sustainable transformation
in agriculture using AI
and a new data science vision



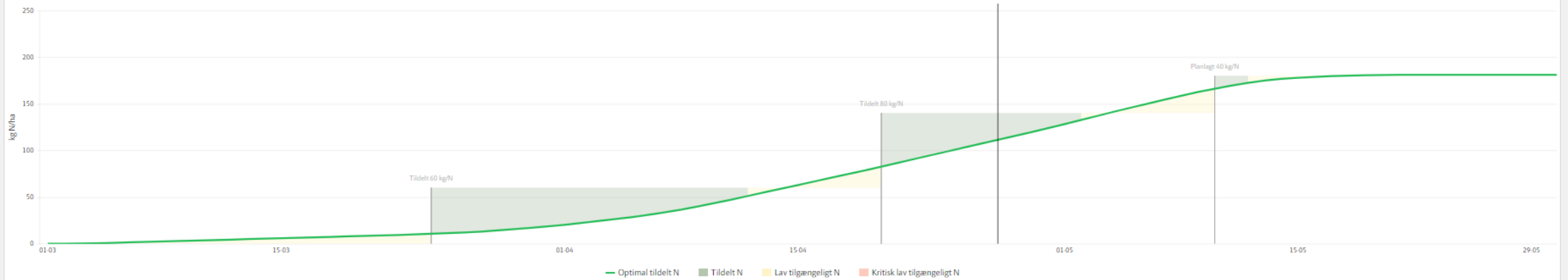
Dynamic fertilizer models – predict the crops nitrogen needs



Kvælstofbehov for vinterhvede (Mark 3-0) ⚠



INFO



Grafen viser dine udførte opgaver samt dine fremtidige planlagte opgaver med kvælstof. Hvis du har planlagte opgaver før dags dato, vises de ikke på grafen. Klik på 'INFO' øverst til højre for mere information.

BEREGN N-BEHOV

Kvælstofbehov

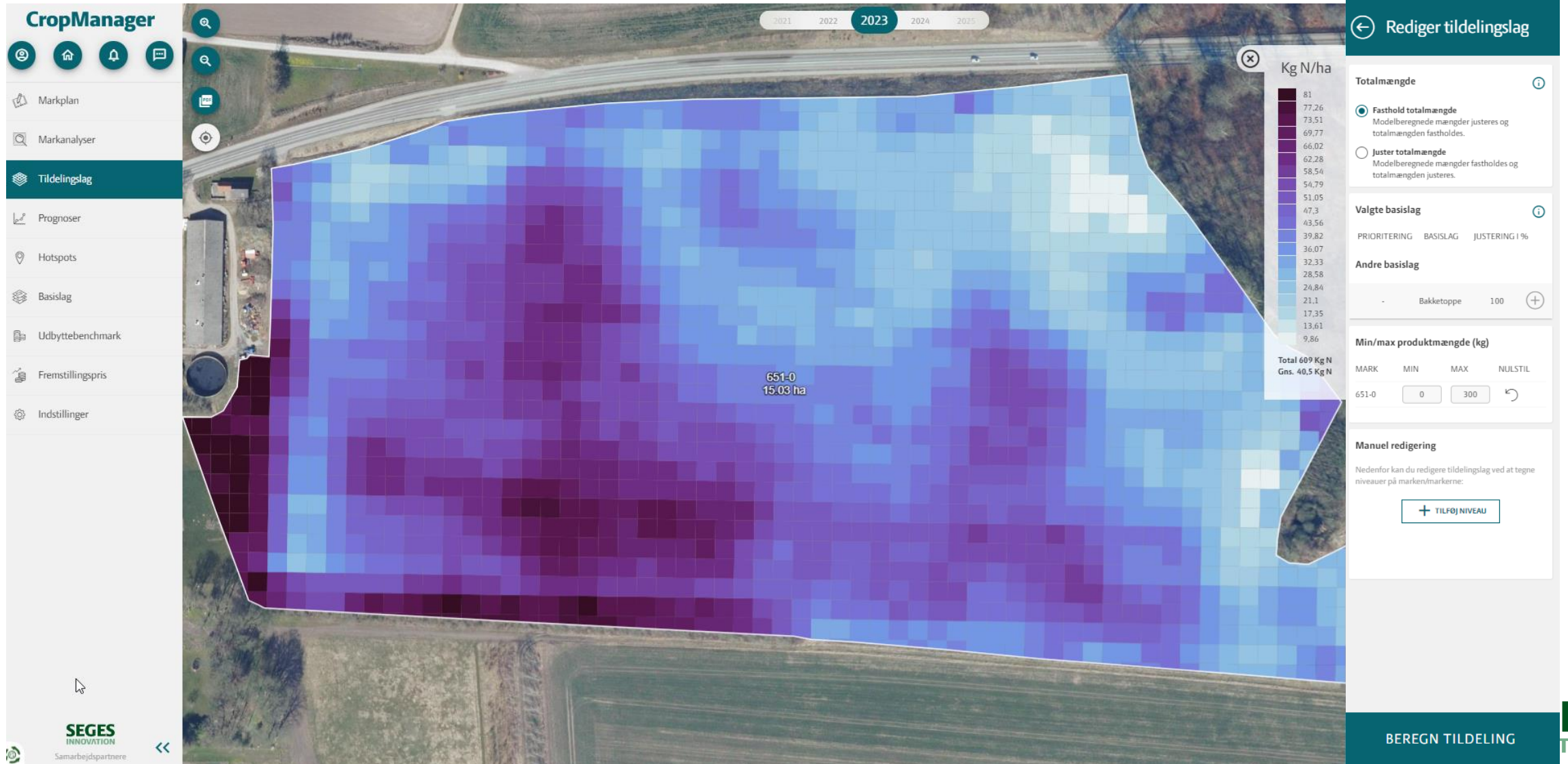
Marker ∇ ↑	Afgrøde	N-Tildelt	N-Planlagt	N-behov	N-Balance ∇	N-0-Skæring	Næste behandling	Status	Dato	Produkt ∇	Mængde	Mængde i kg N
3-0	Vinterhvede	140 kg N/ha	180 kg N/ha	175 kg N/ha	●	15-04-2023	21-04-2023 (0 kg N/ha)					
						15-04-2023		Udført	24-03-2023	NS 27- 4 (4,5 %S)	222 kg	60 kg N/ha
								Udført	20-04-2023	NS 27- 4 (4,5 %S)	296 kg	80 kg N/ha
								Planlagt	21-04-2023	gylle	20 ton	0 kg N/ha
						18-05-2023		Planlagt	10-05-2023	NS 27- 4 (4,5 %S)	148 kg	40 kg N/ha
501-0	Vinterhvede			147	●							
502-0	Vinterhvede			177	●							
503-0	Vinterhvede			183	●							

Harvest prognoses for wheat

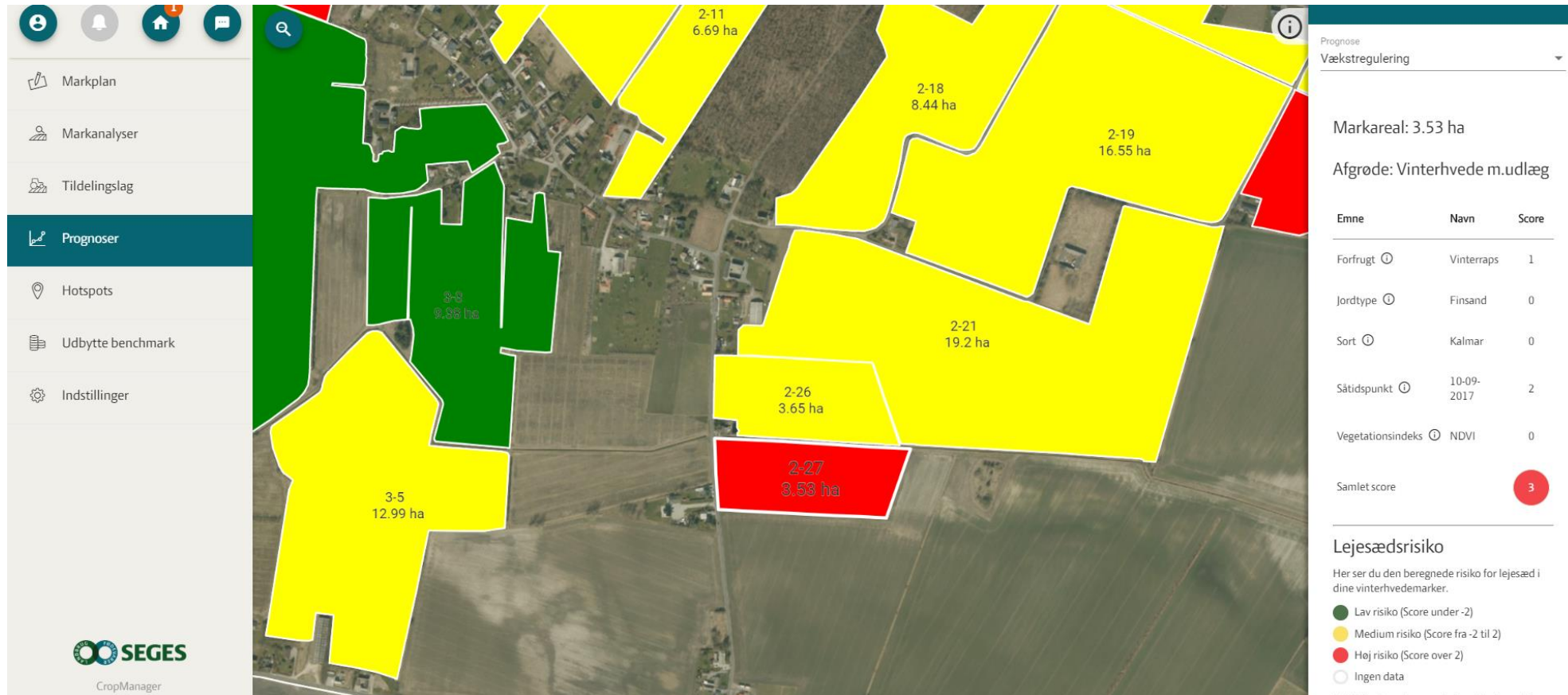


MAE 6,4 hkg/ha

Barley st. 30-32

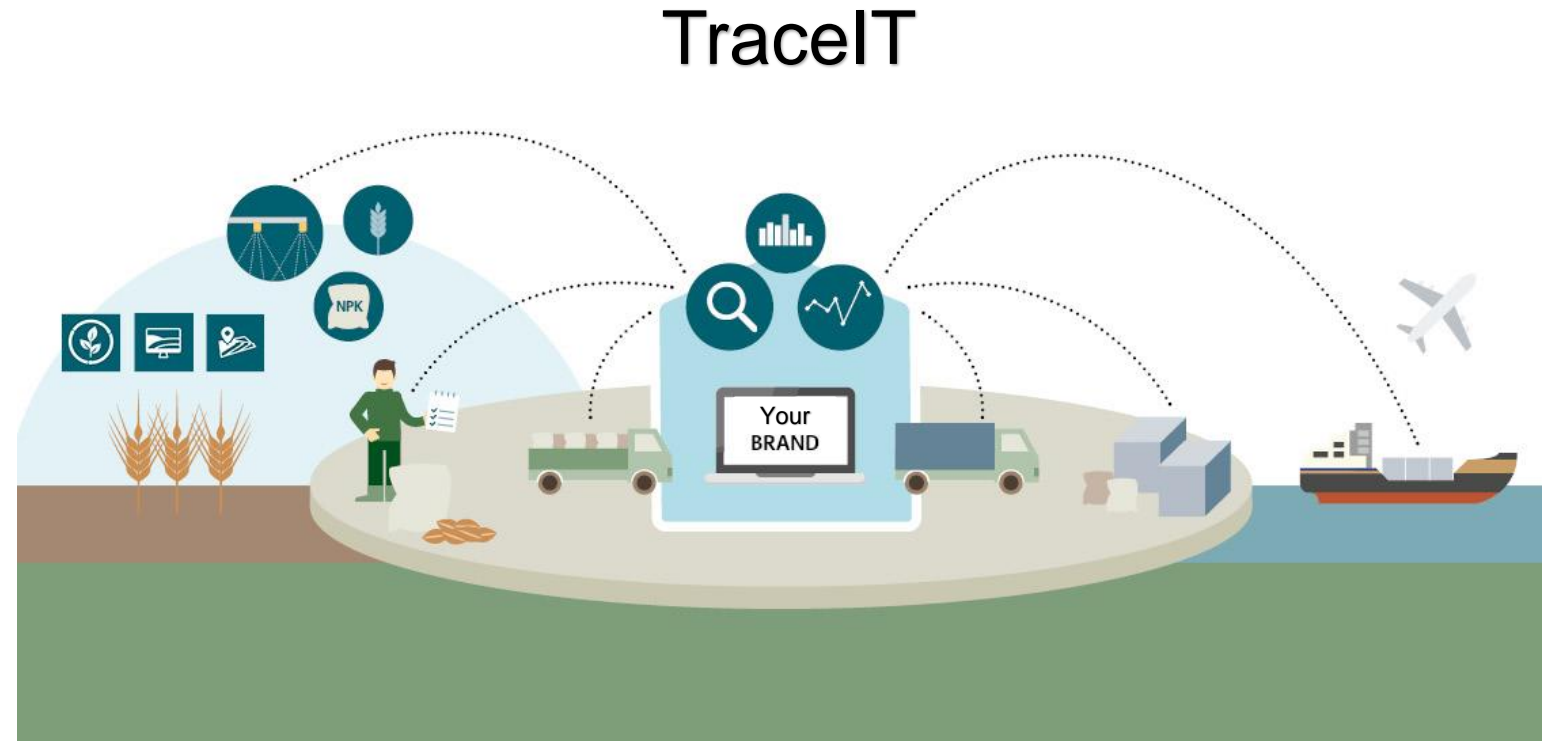


Risk of lodging



What is next

- Data communication with the Agri business
- Create and develop the TracelT platform
 - Trackability
 - Documentation for the traded goods.
 - Optimization
- Using data to help farmers optimize even further



Thanks

SEGES
INNOVATION



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