

MPS

driven by
sustainability



MPS: Floradania meeting

18 November 2021

Introduction



- Remco Jansen - Commercial Manager

Agenda

- Introduction
- Assortment MPS for growers
- Developments, Innovations & Partnerships
- Trends & Figures
- FSI
- Market demands
- Q&A



Growers portfolio

MPS portfolio for growers



<ul style="list-style-type: none"> •Scope: environmental record-keeping •MPS-ABC qualification => one year record-keeping •Record-keeping of both cultivation and environmental themes •Various checks (office/company audits), sampling, use of logo, etc. •<u>Focus: environmental topics</u> •FSI approved standard •Continuous improvement process 	<ul style="list-style-type: none"> •Scope: Good Agricultural Practice •Benchmark with GLOBALG.A.P. v5.2 •Implementation of requirements (and costs) before audit •About 200 requirements for safe, healthy and hygienic production conditions •<u>Focus: production conditions</u> •FSI approved standard •Annual audit (+10% unannounced) 	<ul style="list-style-type: none"> •Scope: ethical principles •GSCP benchmark in 2015-2016 •Implementation of requirements (and costs) before audit •About 200 requirements based on ICC2 (ILO) •<u>Focus: social circumstances</u> •FSI approved standard •Annual audit 	<ul style="list-style-type: none"> •Scope: transparency tool •No equivalent standard •Checks on authorisation and presence of active substances •At least two to four samples + check on usage record-keeping (crop protection) •<u>Focus: active substances</u> •Transparency tool with no start-up costs •Continuous improvement process



Developments, Innovations & Partnerships

Developments & Innovations & Partnerships

Main themes:

- Lower our Footprint
- Crop protection agents improvements (increased safety, lower impact / residues) => EII*
- Introduction of Living wages
- Due Dilligence
- Partnerships

*EII=Environmental Impact Indicator



LCA / CO2: MPS & LetsGrow

- <https://corporate.walmart.com/newsroom/videos/race-to-zero-retail-campaign>

Development

- A uniform method for horticultural products.
- Accepted by all (international) partners in the chain.
- To be used independently of the software and organisation.
- Connection with the European standard development PEFCR.
- Finalised in 2020.

Role MPS

- Development of software tool.
- Focus on climate change.
- First version of tool is currently being tested.
- Commercially available 2022.



LCA & LetsGrow

Status:

- Development dashboard and scenario module
- Calculation for pilot companies
- Setting up a joint business model

Ambition:

- First product launch during IPM 2022
- Integration MPS record-keeping environment with LetsGrow module
- Further development in scope



MPS calculation

Calculation
Calculate the Carbon Footprint by changing different variables

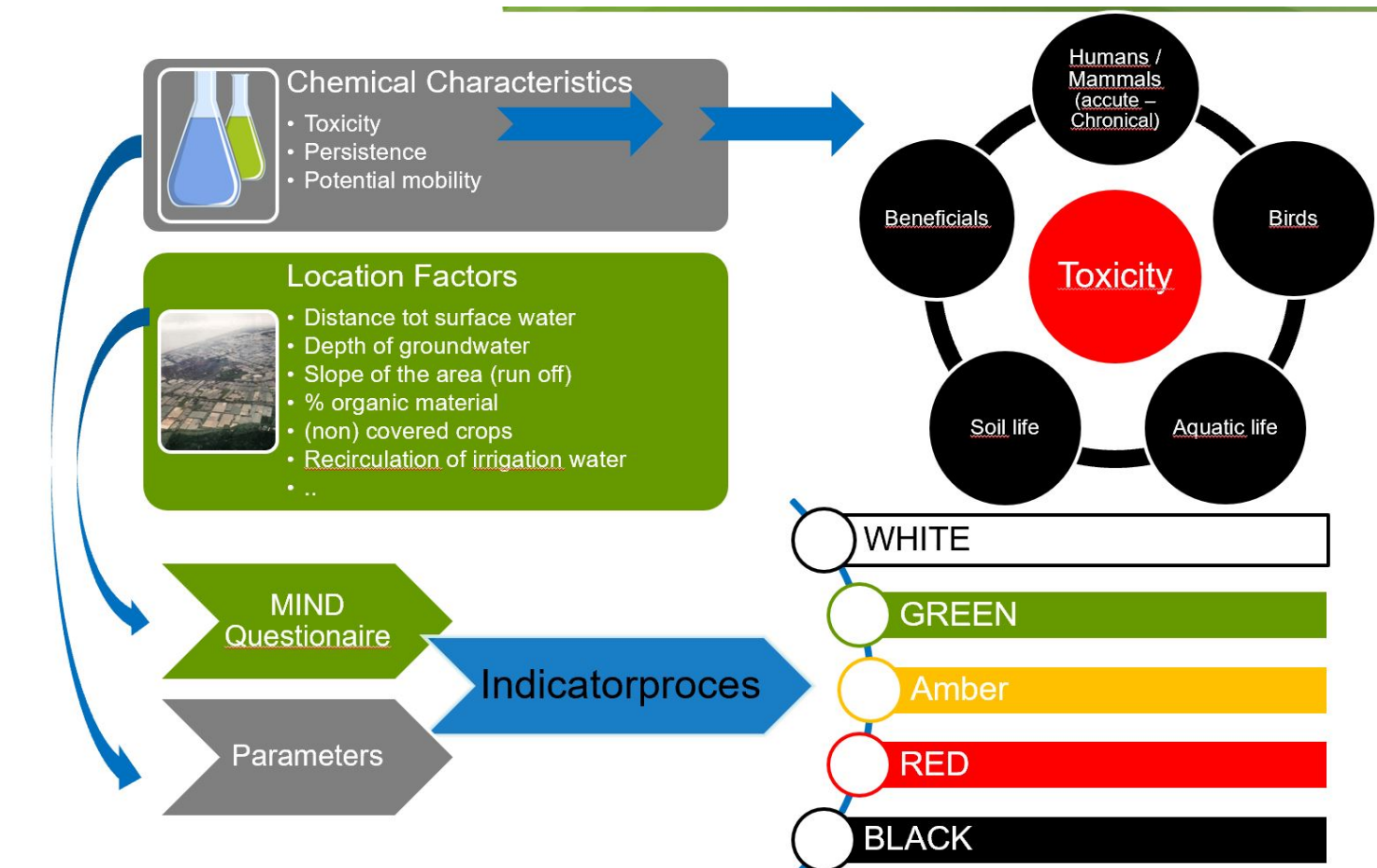
Compare scenarios 2021

Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Subject	2020 CO2 EQ	2021 CO2 EQ		
Electricity	837.886 kg	787.886 kg		
Fertilizers	66.372 kg	64.138 kg		
Gas	2.153.375 kg	2.138.447 kg		
Heat	0 kg	0 kg		
Substrate	2.435.643 kg	2.253.697 kg		
CO2 enrichment	0 kg	0 kg		
Crop protection	3.001 kg	2.835 kg		
Pots & packaging	502.384 kg	495.709 kg		



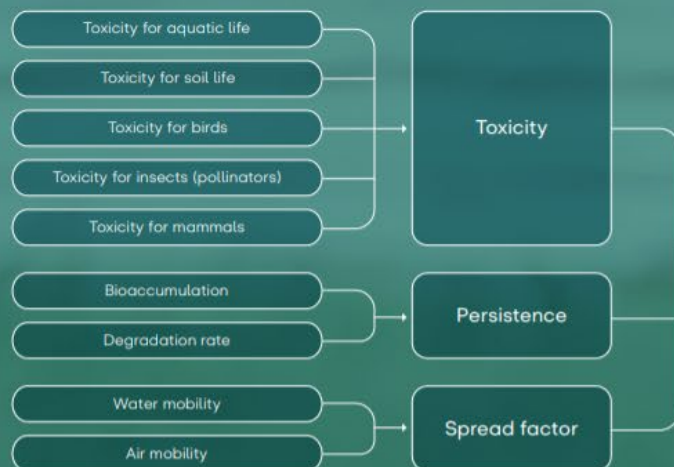
Environmental Impact

From Pesticide Indicator (today) towards EI (future)



Environmental Impact Indicator (EII)

Active substance properties



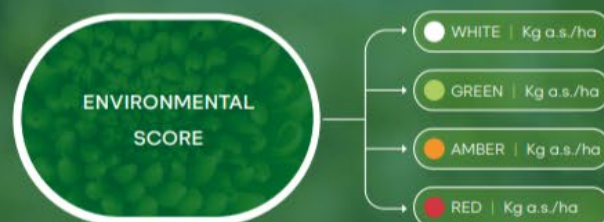
ENVIRONMENTAL
SCORE

The E(nvironmental) score of an active substance is calculated based on various substance properties, environmental factors and emission reduction measures

Environmental factors and emission reduction measures

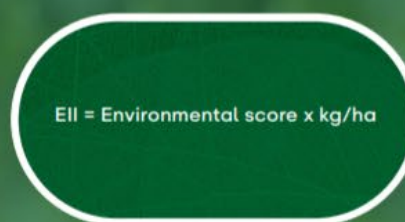


Environmental Indicator: current method



In the current method for the Environmental Indicator, active substances are classified as white, red, amber or green based on their Environmental score. A usage standard is calculated for each colour based on factors such as crop type, location and acreage. The usage standard is expressed in kilograms of active substance per hectare.

Environmental Impact Indicator: new method



With this new method for the Environmental Impact Indicator, the impact of the use of an active substance is calculated by multiplying the Environmental score by the number of kilograms used per hectare. This calculation method provides a more transparent picture of the overall impact of an active substance because its impact is

Development of the new method for the Environmental Impact Indicator (EII)

MPS developed an environmental indicator method called MPS-Environmental-indicator (Milieu-INDicator). This indicator makes the impact of crop protection on the environment measurable. The method classifies crop protection agents as white, green, amber and red, based on the E(nvironmental) score of the active substances they contain. Each colour has an average risk factor (white: Environmental score = 0, green: Environmental score = 1, amber: Environmental score = 10, and red: Environmental score = 20). The Environmental score is calculated based on substance properties, environmental factors and emission reduction measures.

This method allows you to check whether you should rather use a small amount of red agents or a larger amount of green agents. The ultimate environmental impact of an active substance used depends on the Environmental score of the active substance and the

A disadvantage of this method is that the ultimate environmental impact cannot be accurately calculated because it is based on an average Environmental score per colour. Therefore, no distinction is made between different shades of a colour: for example, an orange agent can be 'light' orange, but also 'dark' orange.

To overcome this, we are currently developing a new method for the Environmental Impact Indicator. With this indicator, the impact of the use of an active substance is calculated by multiplying the Environmental score by the number of kilograms used per hectare. This calculation method provides a more transparent and more accurate picture of the overall impact of an active substance because the impact is calculated using its actual Environmental score. In addition, it becomes clear whether limited use of a high-risk active substance results in a lower environmental burden than using a low-risk active



MPS & Fairtrade

Combining the best of both worlds

Situation:

- ▶ Increasing competition of standard organizations
- ▶ HREDD (Human Rights Environmental Due Diligence)
- ▶ Living Wage
- ▶ Digitization (e.g. digital record-keeping, supply chain management)
- ▶ Environmental impact crop protection
- ▶ LCA footprint

Goal:

- ▶ One-stop shop service that will provide the best solution on continuous sustainable improvement (social and environmental).

USP:

- ▶ Collaboration of key experts/innovators in the main sustainable issues (social and environmental).
- ▶ Enabling continuous improvement of producers (dashboard "window of sustainability", with accurate and actual impact data).
- ▶ Clear and strong brand(s)/label(s) towards costumers.

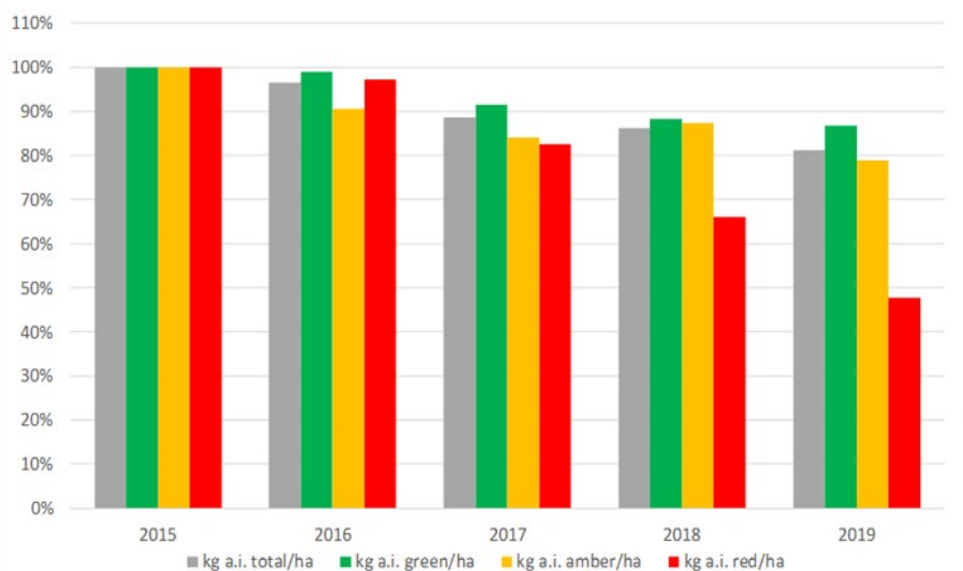
Our way forward!

- Phase 1 (end of Dec'21)
 - Project teams: Consultation on market propositions, defining deadlines
 - External communication of collaboration
- Phase 2 (2022)
 - Execute sub-projects (Develop and prepare for implementation)
- Phase 3 (tbd)
 - Implementation in supply chains and consumer markets



Data: the power of validated data!

Indexed consumption of crop protection



■ -19%
 ■ -13%
 ■ -21%
 ■ -52%



 14%



 12%



 5%



 52%

The integral approach to crop protection agents has a positive effect; We are seeing a sharp decline, particularly with regard to the high risk agents.


 Total


 Low risk


 Average risk


 High risk

Graph 1a. Average usage Crop protection (indexed) of 1778 Companies

2016-2020 Sustainability performance

MPS-ABC trends & figures of Dutch companies*



Resources used by growers within the horticulture sector have an impact on the environment.



Floricultural growers can reduce their environmental impact with the MPS-ABC record-keeping system.



Growers record the use of crop protection agents, fertilisers and energy for MPS-ABC. We make this data transparent and measurable.



The Environmental Indicator developed by MPS makes the impact of crop protection on the environment measurable.



Crop protection agents (CPA)

Average usage crop protection (Indexed)



▼ 25%



Environmental impact (CPA)



▼ 26%



Fertilisers

Decline over the past five years (Indexed)



▼ 12% — ▼ 14%



Fossil fuels

Fossil energy (GJ/ha) (Indexed)



▼ 9%

* Based on 871 Dutch companies with the same crop that recorded their usage during five years.



FSI

Ambition

FSI 2025 Ambition



**“A transparent and responsible
supply chain in 2025”**

The road ahead



**90% sustainable
produced and traded
volumes by 2025**

**Responsible
Production
& Trade**

90%

**Reduction of carbon
footprint for selected
products**

**Responsible
Conduct**



**Reduction of the
living wage gap for
workers**

**Transparent
reporting and due
diligence**

**Integrated
Reporting**



What?

Data and **Transparency** are vital ingredients for future steps

- GAP/Environmental/Social
- Reliable record keeping
- Focus on IPM and lowering environmental impact
- Footprints



→ from Reactive to Pro-active!

How to address these issues as a sector

- creating a common agenda
- joining forces
- engaging with stakeholders
- promote and demonstrate good practices
- communication & storytelling

→ Leading to a responsible and transparent supply chain

About FSI



Markets

Summary of the main issues –> supply chain

Lack of transparency and traceability

No level playing field (also lobby and representation)

Environmental footprint (carbon, water)

Crop protection agents (residues, black lists, pollinators)

Knowledge gap on solutions

Social issues (availability, migrant workers, wages) & Due Diligence (legislation)

We don't communicate well, no storytelling (consumer labels?)

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Thank you for your attention.

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