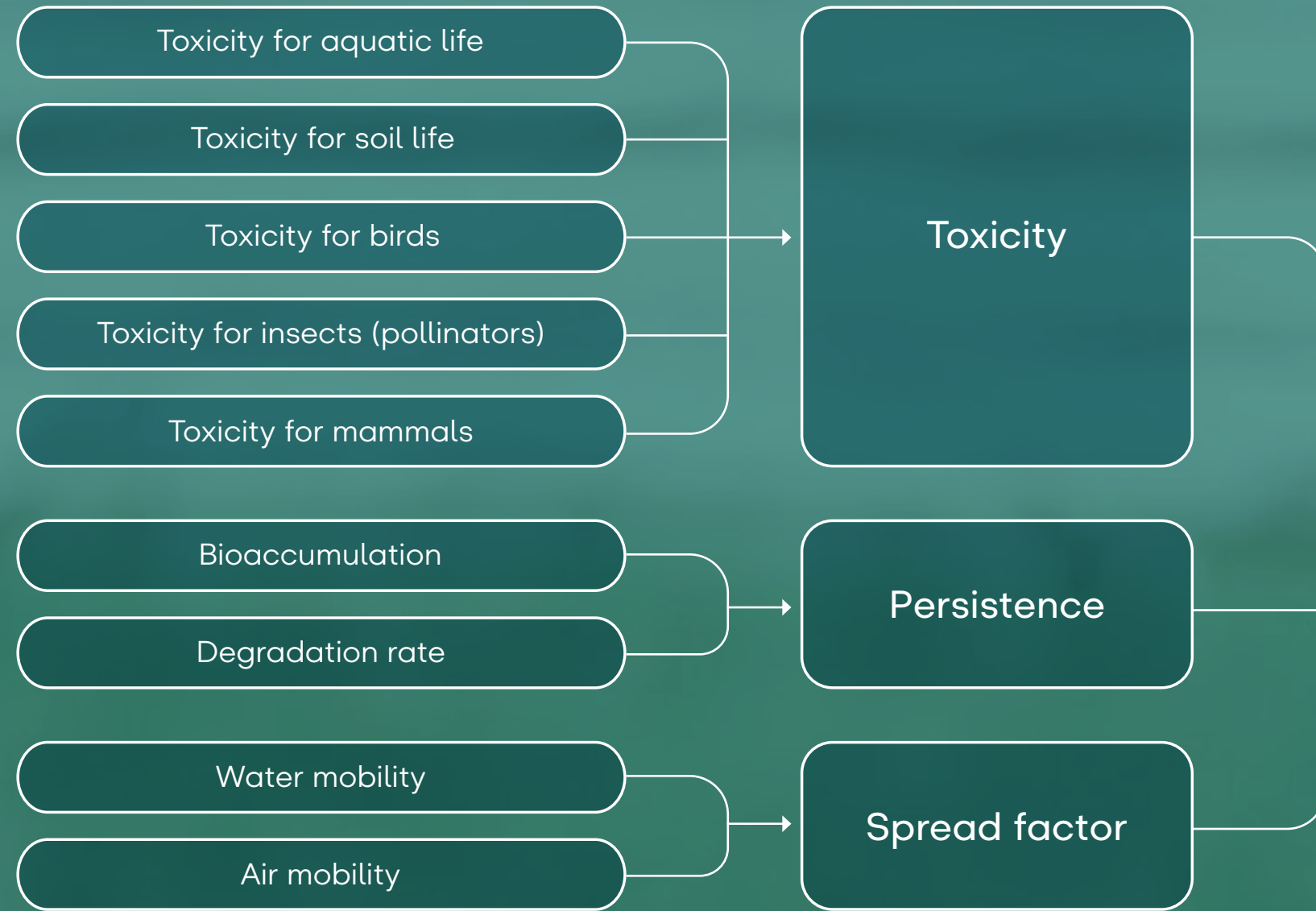
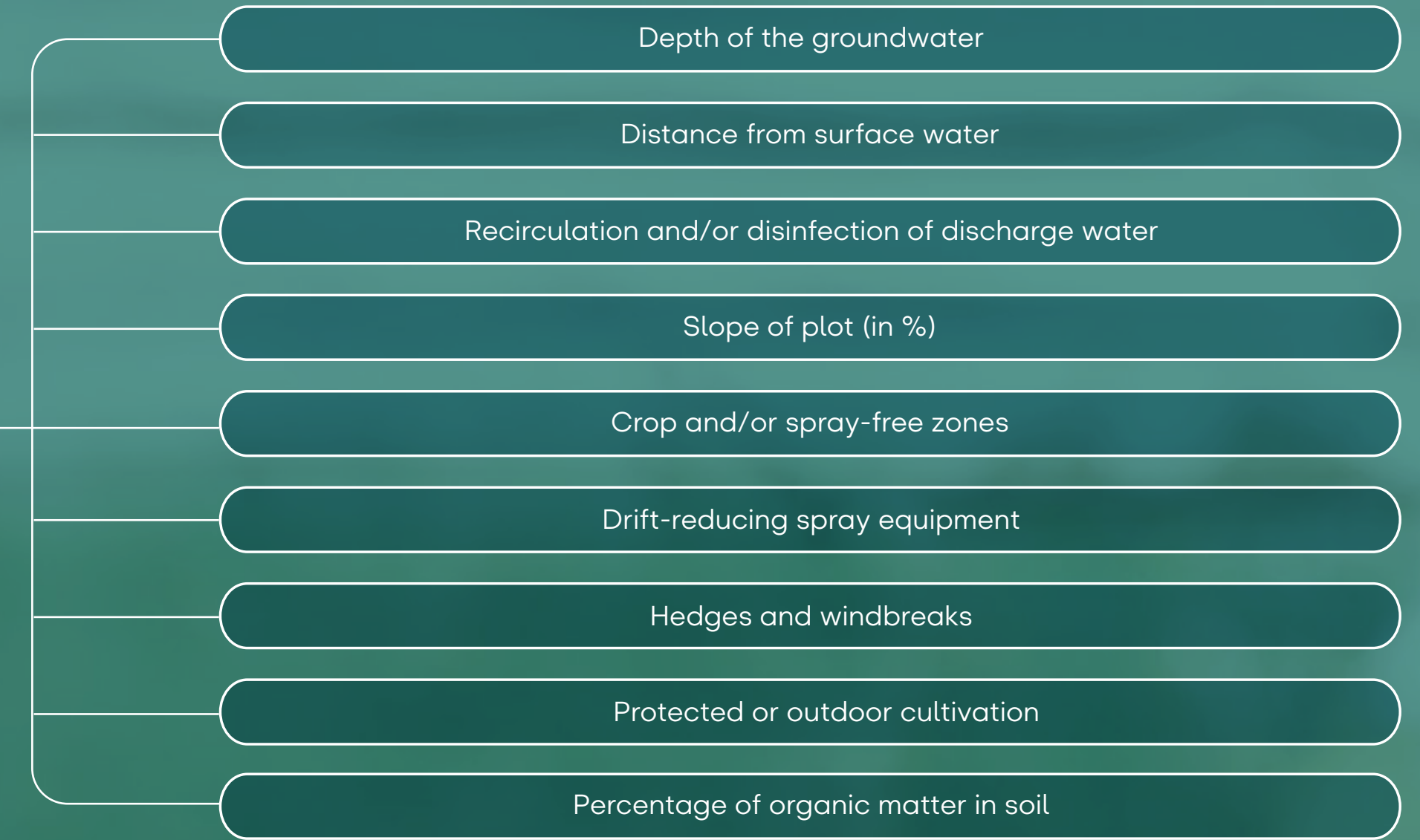


# Environmental Impact Indicator (EII)

## Active substance properties

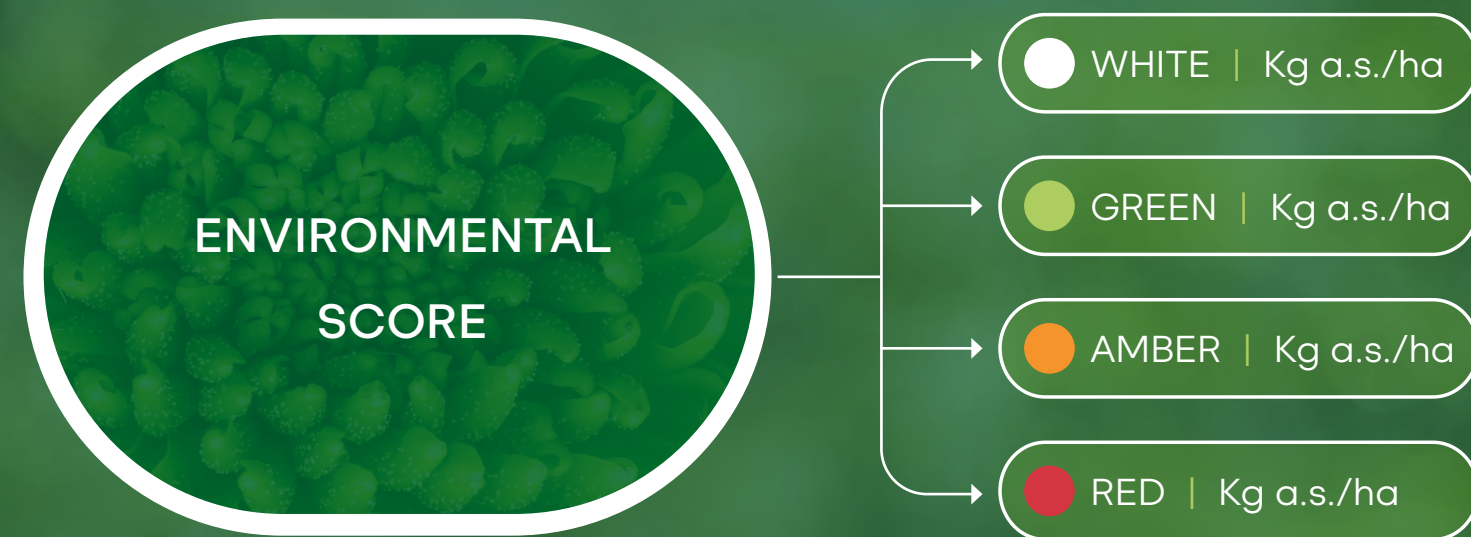


## Environmental factors and emission reduction measures



The E(nvironmental) score of an active substance is calculated based on various substance properties, 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 calculated using its actual Environmental score.

## 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 amount used.

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 substance repeatedly.