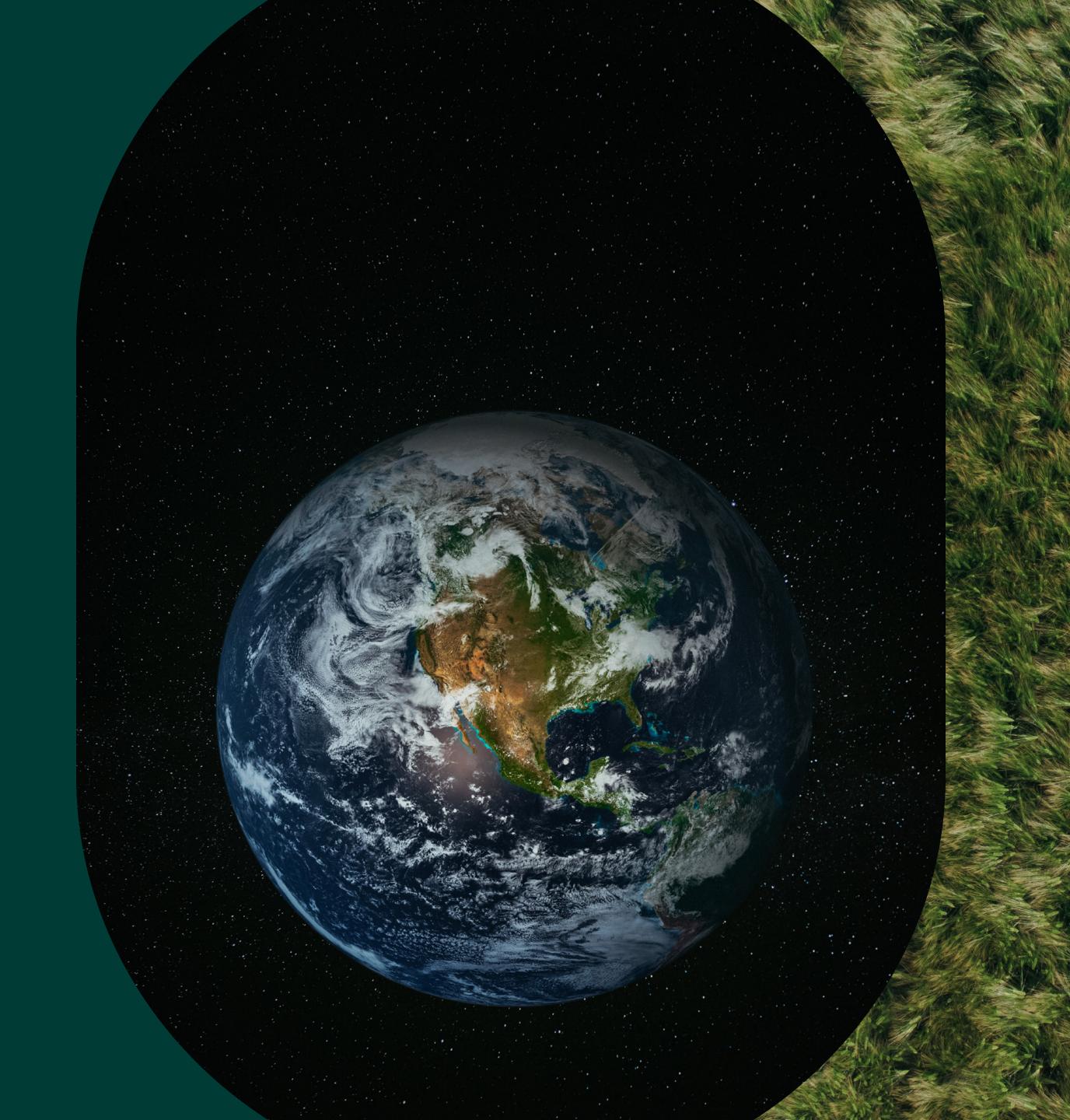


## When we think about sustainability, we think about impact.

EVERGRAIN'S LIFE CYCLE ASSESSMENT —— EXECUTIVE SUMMARY



Read the Full Life Cycle Assessment Report

#### evergrain.

We have an incredible opportunity to change the world for the better, and we aren't going to waste it. We believe that our planet needs a closed-loop system. No resources lost. That's what we call circularity.

Within this document, we've highlighted some findings from our Life Cycle Assessment (LCA) that show the potential that circularity has to reform our industry and sustain our planet.

Disclaimer: all numbers in this report are based on assumptions from the lab/pilot scale and will be updated in 2022 upon the start of full-scale operations.



EXECUTIVE **SUMMARY** 



Backed by AB InBev, we commissioned Blonk Consultants to perform a Life Cycle Assessment (LCA) of the processing of Brewers' Spent Grains (BSG) into the production of our ingredients.

LCA is a framework that allows the quantitative analysis of the environmental burdens of a product or system throughout all the stages of its life cycle, from the extraction of raw materials through production, processing, use, and end-of-life management.

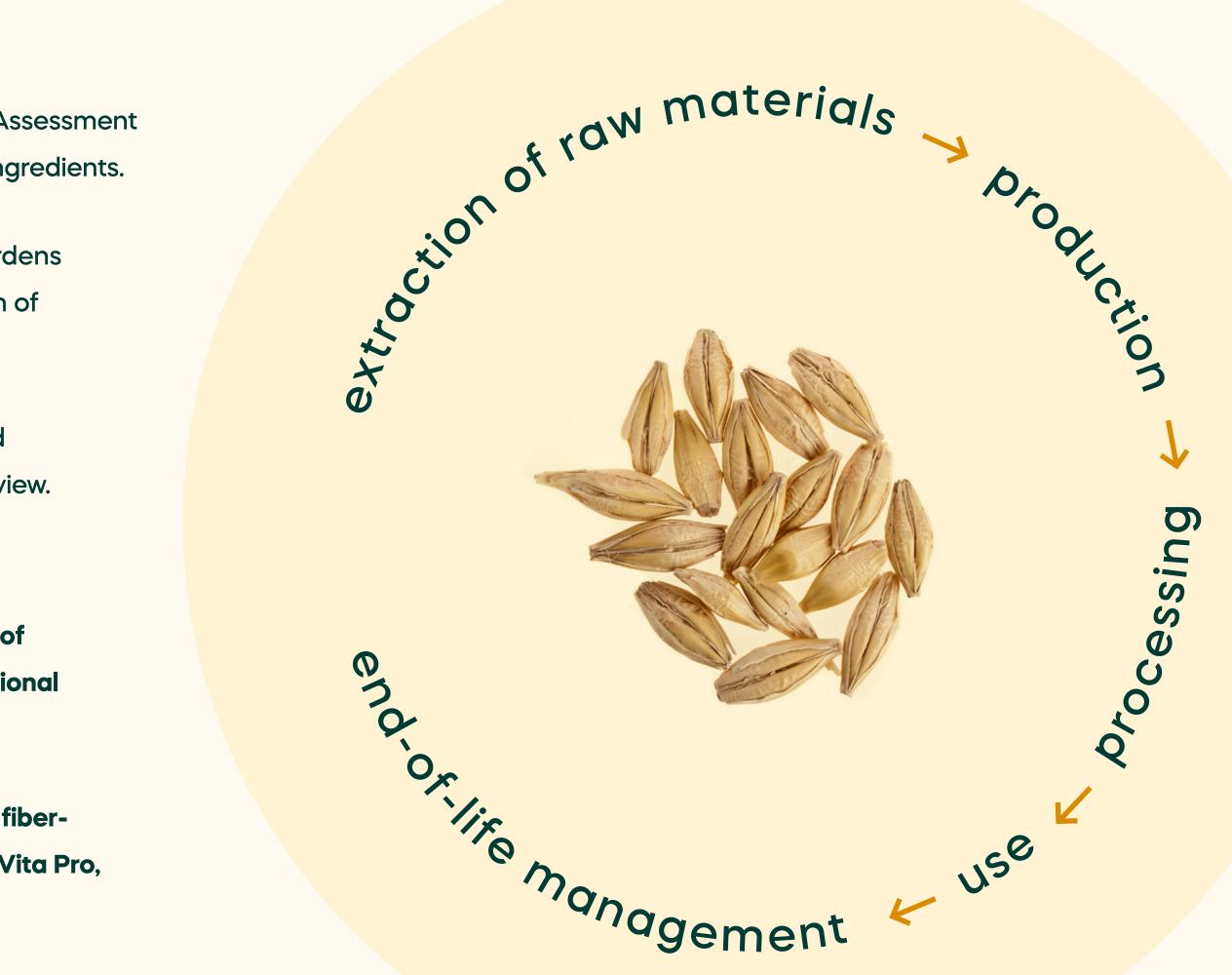
This LCA is conducted according to the methodology proposed in ISO 14040 and 14044 LCA methodological standards (ISO, 2006a, 2006b), including an external review.



Evaluate the environmental impact of the production of our ingredients and compare it to the production of conventional food ingredients that have the same application

Assess the impact of three different BSG ingredients: fiberand protein-rich BSG concentrates (EverVita Fibra and EverVita Pro, respectively) and BSG protein isolate (EverPro)

#### evergrain











# Sour high concentrate barley protein is the best protein ingredient for the Source to the Source the Source to the Source the Source to the So

#### evergrain

Compared to soybean, pea, and whey protein concentrate and to egg white powder, EverPro has —

#### THE LOWEST IMPACT FOR GLOBAL WARMING<sup>1</sup>

- **5x** less carbon than soybean protein
- 8x less carbon than egg white powder

#### THE SMALLEST IMPACT ON FRESHWATER EUTROPHICATION (EXCESS NUTRIENTS IN WATER FROM FARM RUNOFF)<sup>2</sup>

- **14x** less impact than soybean protein
- **22x** less impact than pea protein
- **Nearly 8x** less impact than whey protein
- **32x** less impact than egg white powder



	EXECUTIVE	
ASSESSMENT	SUMMARY	EVERPRO





#### THE SMALLEST IMPACT ON MARINE EUTROPHICATION<sup>3</sup>

- **3x** less impact than soybean protein
- **13x** less impact than pea protein
- **33x** less impact than whey protein
- **32x** less impact than egg white powder

#### evergrain

#### SUBSTANTIALLY LESS LAND USE<sup>4</sup>

19x	less impact than soybean protein
20	

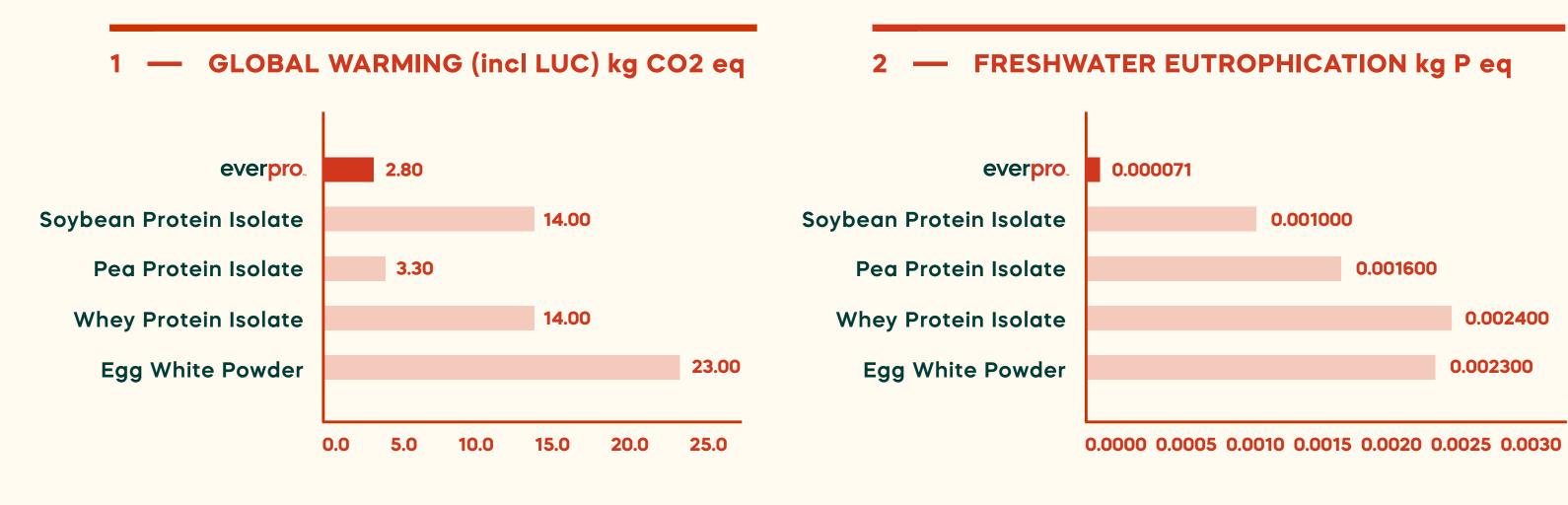
- **39x** less impact than pea protein
- **30x** less impact than whey protein
- **50x** less impact than egg white powder

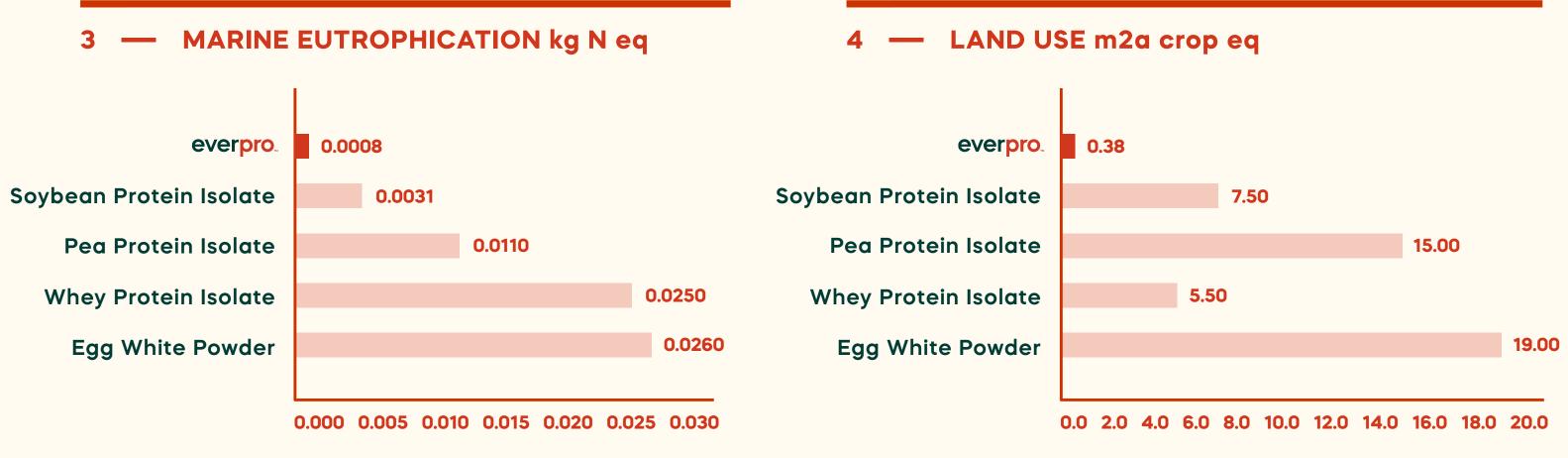
#### SMALLEST IMPACT ON MINERAL RESOURCE SCARCITY

#### CONSIDERABLY LESS WATER CONSUMPTION



LIFE CYCLE	EXECUTIVE	
ASSESSMENT	SUMMARY	EVERPRO







# **D**ata





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## Our protein- and fiberrich barley ingredient is the best of both worlds and the best for the .



Compared to soybean, pea, and wheat gluten protein concentrate, EverVita Pro has —

#### THE LOWEST IMPACT ON GLOBAL WARMING<sup>5</sup>

Nearly 2x less carbon than wheat gluten meal Nearly 5x less carbon than soybean protein

#### THE LEAST FINE-PARTICULATE MATTER FORMATION

Fewer fine, inhalable particles with diameters of 2.5 micrometers and smaller



LIFE CYCLE	EXECUTIVE	
ASSESSMENT	SUMMARY	EVERVITA PRO





#### SMALLEST IMPACT ON FRESHWATER<sup>6</sup> AND MARINE<sup>7</sup> EUTROPHICATION

52x less impact on freshwater than pea protein

**23x** less impact on marine than pea protein

#### evergrain

#### SMALLEST IMPACT ON MINERAL RESOURCE SCARCITY AND TERRESTRIAL ACIDIFICATION

Fewer changes in soil chemistry

#### SUBSTANTIALLY LESS LAND USE<sup>8</sup>

**Over 40x** less than soybean protein

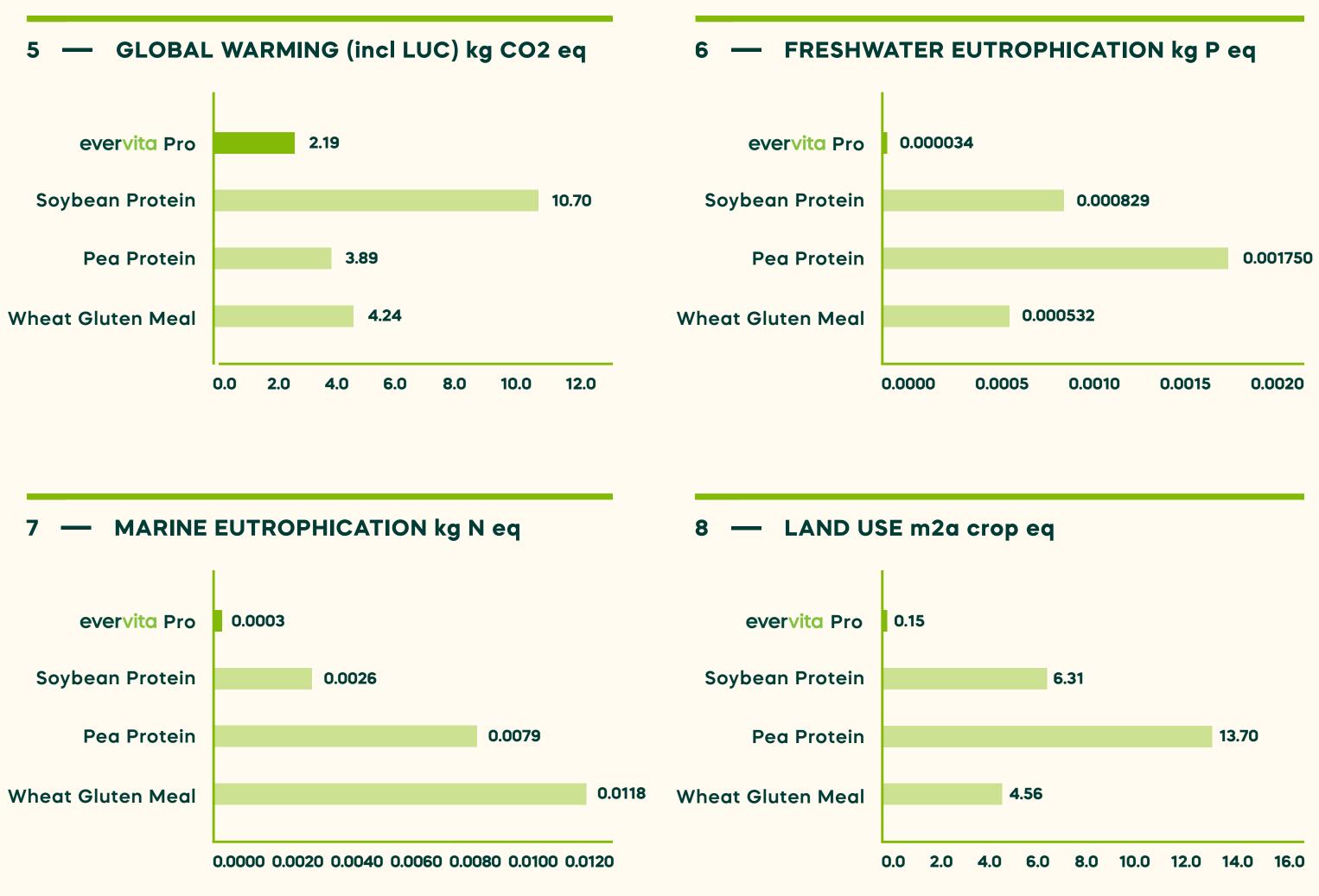
**Nearly 89x** less than pea protein

**Over 29x** less than wheat gluten

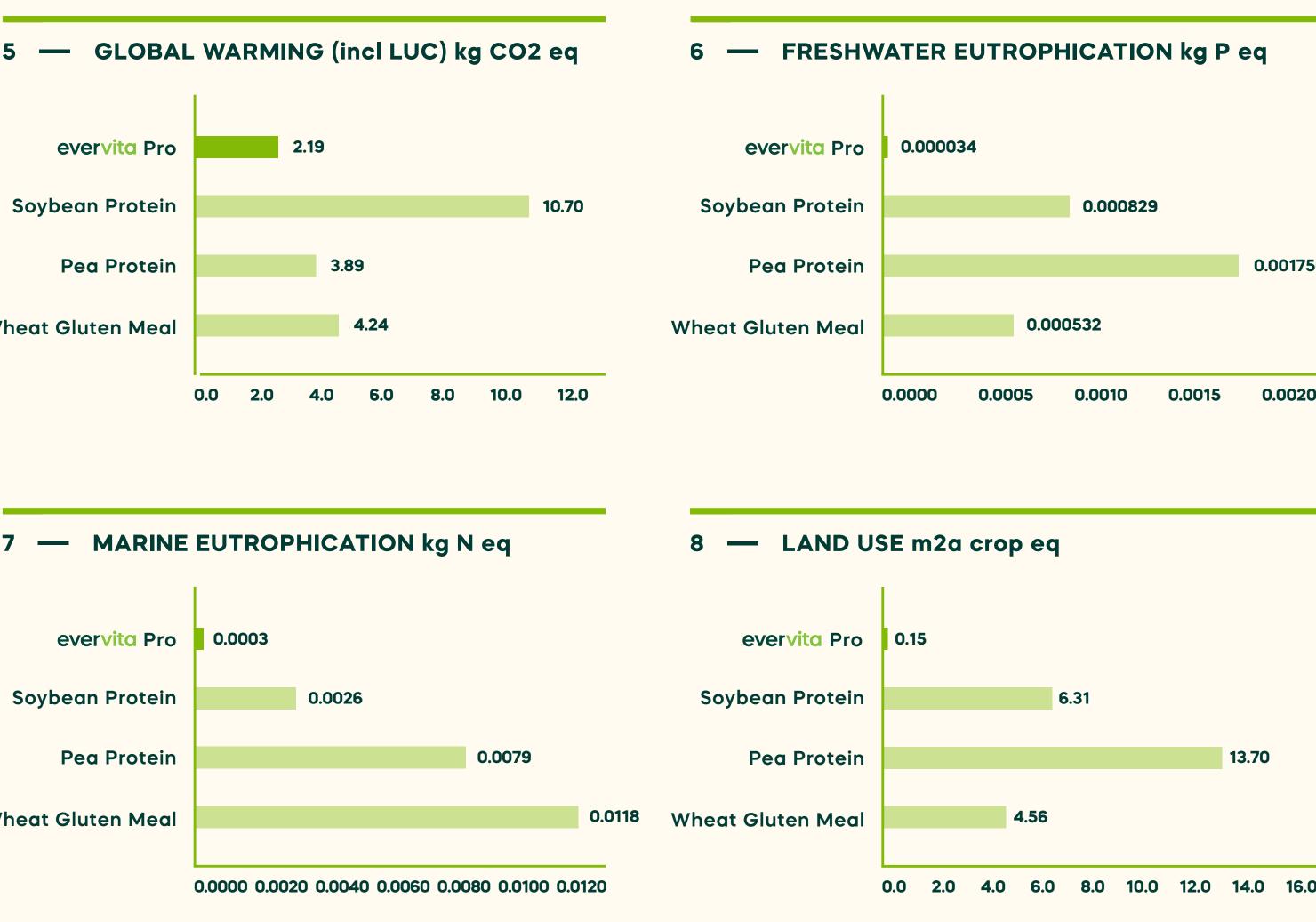
#### **CONSIDERABLY LESS WATER CONSUMPTION**

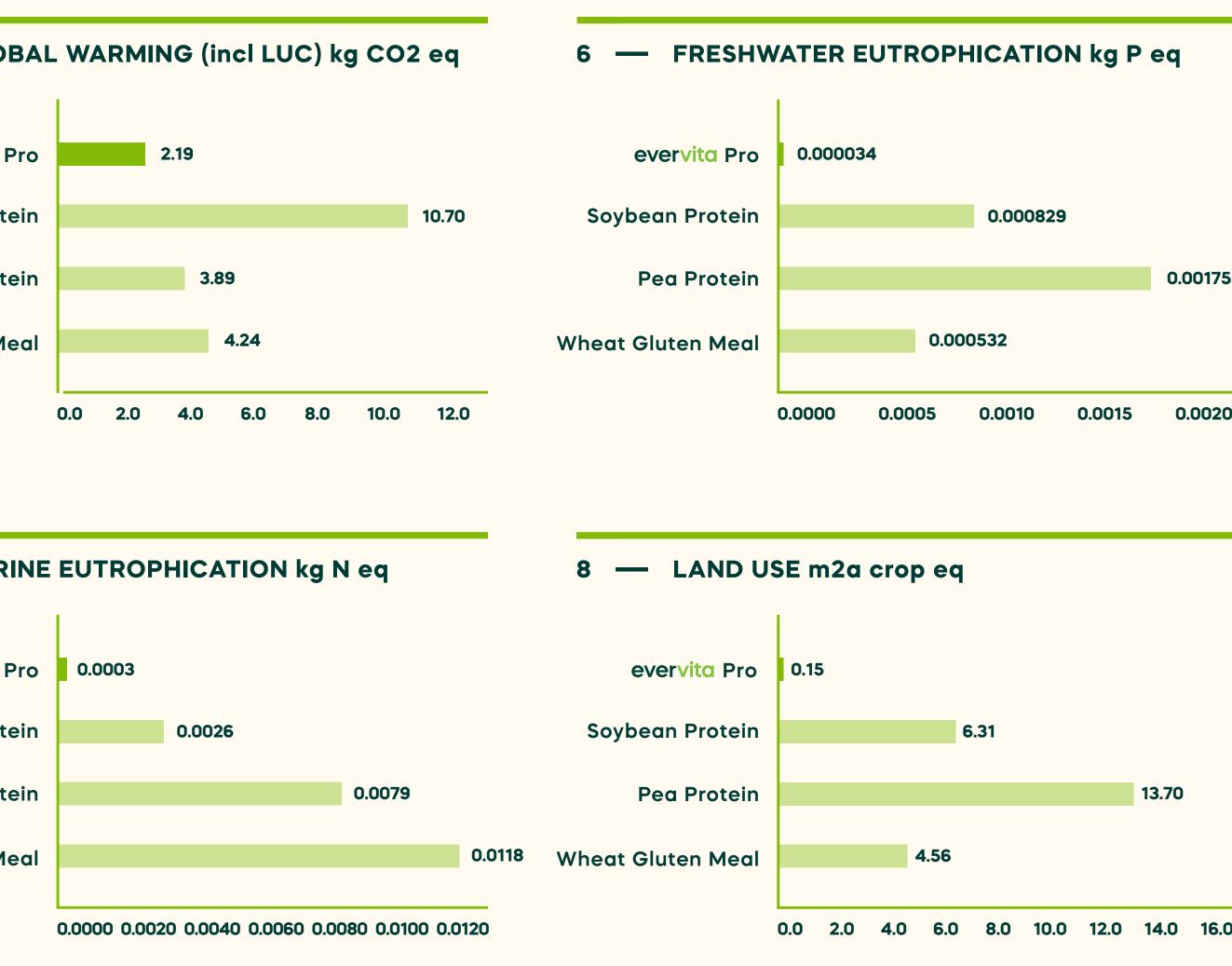


LIFE CYCLE	EXECUTIVE	
ASSESSMENT	SUMMARY	EVERVITA PRO















LIFE CYCLE	EXECUTIVE	
ASSESSMENT	SUMMARY	<b>EVERVITA FIBRA</b>



## **Our fiber-rich barley** ingredient is a more sustainable alternative to wheat bran.



Compared to wheat bran concentrate, EverVita Fibra has —

#### A COMPARABLE IMPACT ON GLOBAL WARMING<sup>9</sup>

#### THE LEAST FINE-PARTICULATE MATTER FORMATION

**Nearly 3x** less than wheat bran



LIFE CYCLE	
ASSESSMENT	

EXECUTIVE SUMMARY







#### SMALLEST IMPACT ON FRESHWATER<sup>10</sup> AND MARINE<sup>11</sup> EUTROPHICATION

**7**x less impact on freshwater than wheat bran

**17x** less impact on marine than wheat bran



#### SMALLEST IMPACT ON MINERAL RESOURCE SCARCITY AND SOIL ACIDIFICATION

**2**x less impact on mineral resources than wheat bran

**5**x less acidification than wheat bran

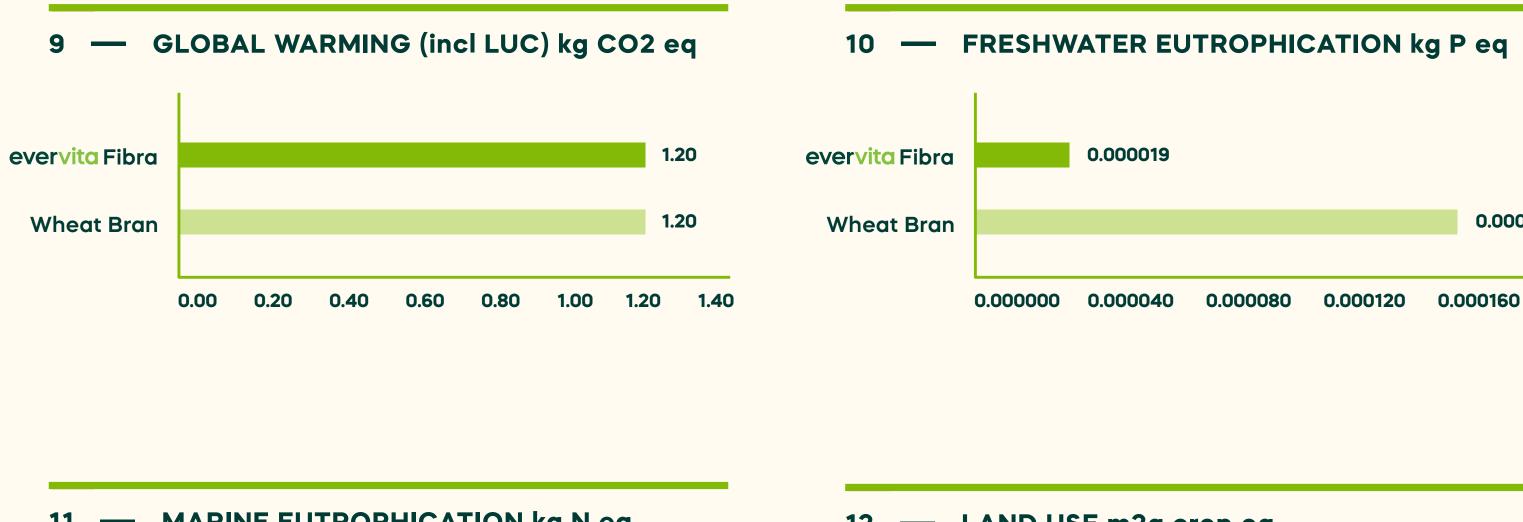
#### 15x LESS LAND USE<sup>12</sup>

#### **CONSIDERABLY LESS WATER CONSUMPTION**

















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### REALIZE THE POTENTIAL OF





READ —— THE FULL LIFE CYCLE ASSESSMENT REPORT

VISIT —— EVERGRAININGREDIENTS.COM

Disclaimer: all numbers in this report are based on assumptions from the lab/pilot scale and will be updated in 2022 upon the start of full-scale operations.

