



Leap

LIVESTOCK ENVIRONMENTAL ASSESSMENT AND
PERFORMANCE PARTNERSHIP

Camillo De Camillis

Proliferation of environmental assessment methods, claims and recommendations



14.5%



51%



News | Science

News - Science

Third of early deaths could be prevented by everyone giving up meat, Harvard says

OXFORD TODAY

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Home > Interviews > What if we all turned vegan by 2050?

15 MARCH 2017

What if we all turned vegan by 2050?

It's the way to beat climate change, argues Dr Marco Springmann, James Martin fellow at the Oxford Martin Programme on the Future Of Food.

ab By Neil Halligan

Dairy is the root of all environmental evil, says Prince Khaled

Founding chairman of KBW Investments and KBW Ventures said people should reduce consumption of meat, fish and dairy

Sat 29 Sep 2018 12:17 PM

0 comments

f in t g+

Related Articles



Saudi's Prince Khaled plans transform global F&B with new partnership

New York City announces world-first plan to cut red meat supply in municipal buildings by 50 per cent under mayor Bill de Blasio's 'Green New Deal'

- The city's mayor Bill de Blasio announced the Green New Deal on Monday
- Under new plans red meat supply in municipal buildings will be halved
- If used New York will be the first city in the world to adopt the new scheme

By GEORGE MARTIN FOR MAILONLINE
PUBLISHED: 14:04 BST, 25 April 2019 | UPDATED: 14:27 BST, 25 April 2019

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Since its founding, Impossible Foods intentionally designed a robust supply chain that is highly scalable, with products sourced from abundant plant crops. Impossible Foods has a clear, long-term roadmap to exponentially expand capacity, and the Series E funding will accelerate the scaleup.

The company's goal is to eliminate the need for animals in the food chain by 2035. To achieve continued breakout growth, Impossible Foods is actively planning to add to and diversify its manufacturing capacity.


The company will provide additional details on expansion plans later this year.

About Impossible™ Foods:

Based in California's Silicon Valley, Impossible Foods makes delicious, nutritious meat and much smaller environmental footprint than meat from animals. The privately held company Brown, M.D., Ph.D., Professor Emeritus of Biochemistry at Stanford University and a former investigator. Investors include Khosia Ventures, Bill Gates, Google Ventures, Horizons Ven Temasek, Sailing Capital, and Open Philanthropy Project.

Impossible Foods 

Company

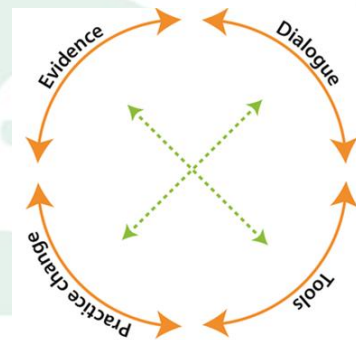
 impossiblefoods.com

Impossible Foods Inc. is a company that develops plant-based substitutes for meat and dairy products. Wikipedia

Founder: Patrick O. Brown
Founded: 2011
Headquarters: Redwood City, California, United States
Key person: Dennis Woodside (President)
Type of business: Privately held company

The **LEAP Partnership** is a multi-stakeholder initiative committed to improving the environmental performance of livestock supply chains, whilst ensuring its economic and social viability

- **LEAP builds up consensus on comprehensive guidance and methodology** to:
- Assess the environmental performance of livestock supply chains
- Monitor performance over time (environmental tracking)
- Generate evidence for shaping policy measures and business strategies



LEAP



2019

2030

Why

- To show the public that policies and action are based on environmental assessment methods agreed at global level in a multi-stakeholder platform
- To include not only burdens but also benefits in environmental assessments and to change the narrative
- To share knowledge and demonstrate with evidence that substantial environmental improvement is possible
- To be part of the discussion on applications of FAO LEAP guidelines

Governance

- ✓ Steering Committee: **equal say**
- ✓ Secretariat hosted at FAO
- ✓ Participation is **open and voluntary**



LEAP Secretariat



Technical Advisory Groups

FAO LEAP chairmanship 2019



LEAP Guideline Development

Formation of the Technical Advisory Group (TAG)

Guidelines development (TAG meetings)

Review by Peers and Secretariat

Review by Steering Committee

Public review

LEAP Achievements Phase 1&2 (2012-2018)

Feed

Food and Agriculture Organization of the United Nations

VERSION 1

Environmental performance of animal feeds supply chains
Guidelines for assessment

Poultry

Food and Agriculture Organization of the United Nations

VERSION 1

Greenhouse gas emissions and fossil energy use from poultry supply chains
Guidelines for assessment

Small Ruminants

Food and Agriculture Organization of the United Nations

VERSION 1

Greenhouse gas emissions and fossil energy use from small ruminant supply chains
Guidelines for assessment

Crop		Agro Ecological Zone	
Region Type	Italy	Production System	Extensive
Region	Western Europe	Production Practice	Herbicide crop
Country	Austria		

Life Cycle Inventory (LCI)		GLEAM output	
Seed rate	185.3 kg / ha	Seed	37.03 kg CO ₂ -eq / kg DM
Organic fertilizer	5.7782 kg N / ha	Organic fertilization	196.45 kg CO ₂ -eq / kg DM
Artificial fertilizer	2.312 kg N / ha	Synthetic fertilization	1179.73 kg CO ₂ -eq / kg DM
Urea	0.034 AN	Energy use	61.63 kg CO ₂ -eq / kg DM
Nitrate sol.	0.227 CAN		
NPK	0.132 AP		
Ash, NH ₄	0.062 AS		
Lime	5.72 kg / ha	Crop protection	177.72 kg CO ₂ -eq / kg DM
Phosphorous	1155.8 kg / ha	Land work	318.93 kg CO ₂ -eq / kg DM
Pesticides	11556.8 kg AI / ha		
		Total excl. LU/LUC	1970.53 kg CO ₂ -eq / kg DM
Ploughing	0 # / yr	Mech	0.2 #
Seedbed preparation	0 # / yr	Chem	0.8 #
Seeding	1 # / yr	Manual	0 #
Organic fert. Application	1 # / yr		
Synthetic fert. Application	1 # / yr		
Pesticide spraying	2 # / yr		
Weeding	1 # / yr		
Irrigation	0 # / yr		
Harvesting	0 # / yr		
Yield	138676.7 kg DM / ha	Land use	0.22 kg CO ₂ -eq / kg DM
		Land use change	0.24 kg CO ₂ -eq / kg DM

Pigs

Food and Agriculture Organization of the United Nations

DRAFT FOR PUBLIC REVIEW

Environmental performance of pig supply chains
Guidelines for assessment

Biodiversity

Food and Agriculture Organization of the United Nations

DRAFT FOR PUBLIC REVIEW

Principles for the assessment of livestock impacts on biodiversity
Guidelines for assessment

Large ruminants

Food and Agriculture Organization of the United Nations

DRAFT FOR PUBLIC REVIEW

Environmental performance of large ruminant supply chains
Guidelines for assessment

Methodological notes

Food and Agriculture Organization of the United Nations

DRAFT FOR PUBLIC REVIEW

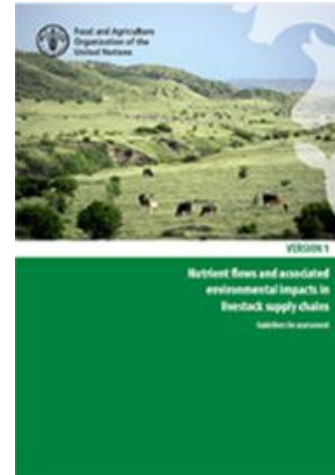
Developing sound tools for transition to sustainable food and agriculture
LEAP Partnership Life Cycle Assessment Guidelines on Livestock supply chains
Methodological notes

LEAP Achievements Phase 1&2 (2012-2018)

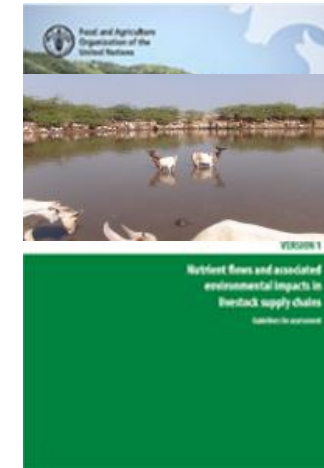
Soil carbon



Nutrients cycle

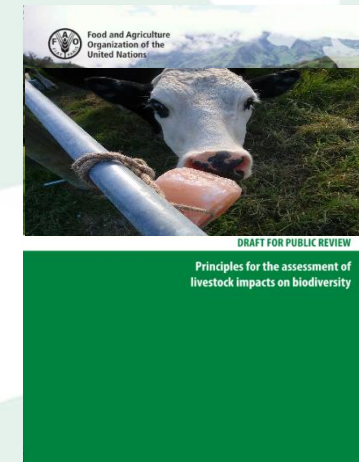
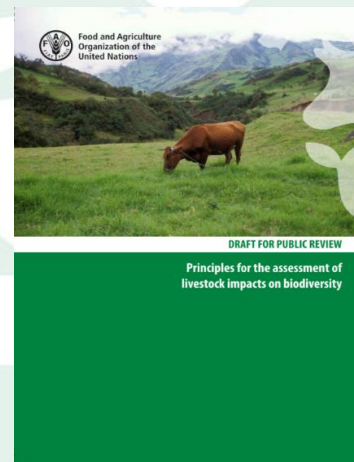


Water (in press)



Biodiversity (in review) Feed Additives (in review)

Road tests



LEAP Work Programme 2019-2021



LEAP3 overall objective

To support the livestock sector and its supply chains towards improving the sustainability of production practices through the application of LEAP guidelines
[21st LEAP SC meeting]



LEAP Work Programme 2019-2021



- Road Testing
- Revision and development of LEAP guidelines

New guidelines development:

- Ecosystem services assessment
- Eco-toxicity
- Biomass carbon stocks
- Benefits from Technology+circular bioeconomy

Road testing
Strategy

- Protocols
- Data collection sheets
- Workshop (data and calculators)

Road testing
**(Sector
commitment
for practice
improvement)**

TAG+Guidelines
Version
#2+Adoption
+Action

2020

2021

New guideline development

ROAD TESTING | Overall objectives

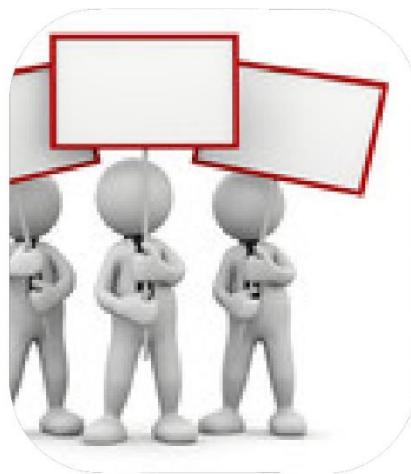
- To address **inconsistencies** and cross-cutting methodological issues in all LEAP guidelines
- To test whether the LEAP guidelines are easily **applicable** in all situations
- To identify **tools** required for the assessment of the environmental performance
- To **mainstream LEAP guidelines** into the existing environmental calculators and tools
- To figure out how to use the different **LEAP guidelines at the same time**
- To define the data requirements fitting for the purpose of the assessment
- To **build awareness** and enhance the use of LEAP guidelines through **adoption**



Road testing strategy

- FAO LEAP Secretariat (**consistency check**)
- FAO + Countries + Local partners (**national projects**)
- LEAP partners [Private sector, Countries, NGOs]
(**local + sectoral scale**)

LEAP Plenary Meeting - 21 October 2019





More information can be obtained at
www.fao.org/partnerships/leap/en/

Livestock-Partnership@fao.org