

Affichage environnemental : comment établir une méthodologie d'étiquetage de l'impact des produits alimentaires ?

Arnaud Hélias



Yannick Biard



COMITE DES PARTENAIRES
AFFICHAGE ENVIRONNEMENTAL ALIMENTAIRE

-
07 juillet 2022

07-07-2022

Commissariat Général au Développement Durable



The International Journal of Life Cycle Assessment
<https://doi.org/10.1007/s11367-022-02071-8>

COMMENTARY AND DISCUSSION ARTICLE



Implementing environmental labelling of food products in France

Arnaud Hélias¹  · Hayo M. G. van der Werf² · Louis-Georges Soler³ · Franck Aggeri⁴ · Jean-Yves Dourmad⁵ · Chantal Julia^{6,7} · Lydiane Nabec⁸ · Sylvain Pellerin⁹ · Bernard Ruffieux¹⁰ · Gilles Trystram¹¹

Received: 31 May 2022 / Accepted: 1 June 2022
© The Author(s) 2022

Abstract

Consumers increasingly demand information about the environmental impacts of their food. The French government is in the process of introducing environmental labelling for all food products. A scientific council was set up, and its main conclusions are presented in this article, through six questions: What environmental issues should be considered? What objective should be targeted? What data are needed, and for whom? What methods for assessing environmental impacts? Which environmental scores should be chosen? What label format should be proposed? By answering these questions and considering the context, the available data, the proposed methods and adjustments, and the knowledge of consumer perception of formats, the scientific council considers that a labelling scheme is feasible and relevant.

Keywords Data · Environmental labelling · Food · Operationalization · Public policy

Comité des partenaires 27 mars 2023

Context: a law from French parliament to environmental labelling



- French **Law 2021-1104** of 22 August 2021 on combating climate change and strengthening resilience to its effects

Art. L. 541-9-11

- A labelling system intended to provide consumers with information on the environmental impacts or the environmental impacts and compliance with social criteria of a good, a service or a category of goods or services placed on the national market is made compulsory, under the conditions and subject to the reservations set out in Article L. 541-9-12.
- This display shall be carried out by means of marking or labelling or by any other suitable method. It is visible or accessible to the consumer, in particular at the time of purchase.
- The information provided shall show, in a reliable and easily understandable way for the consumer, the environmental impact of the goods and services in question over their entire life cycle. It shall take into account the environmental impacts of the goods and services in question, considered according to their relevance to a given category, in particular in terms of greenhouse gas emissions, damage to biodiversity and consumption of water and other natural resources. It shall also take into account the environmental externalities of the production systems of the goods and services considered, as scientifically assessed, in particular for agricultural, forestry and food products.
- ...

} **Environmental labelling ...**

} **... available for all products...**

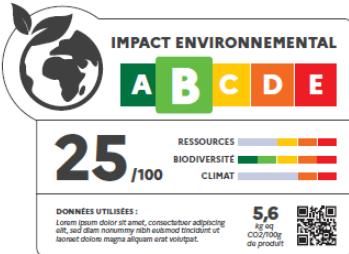
} **... specific...**

} **... first : Food**



Impératif de calendrier

- Des parties prenantes « actives » !
- Demande sociétal croissante
- Besoin d'uniformiser



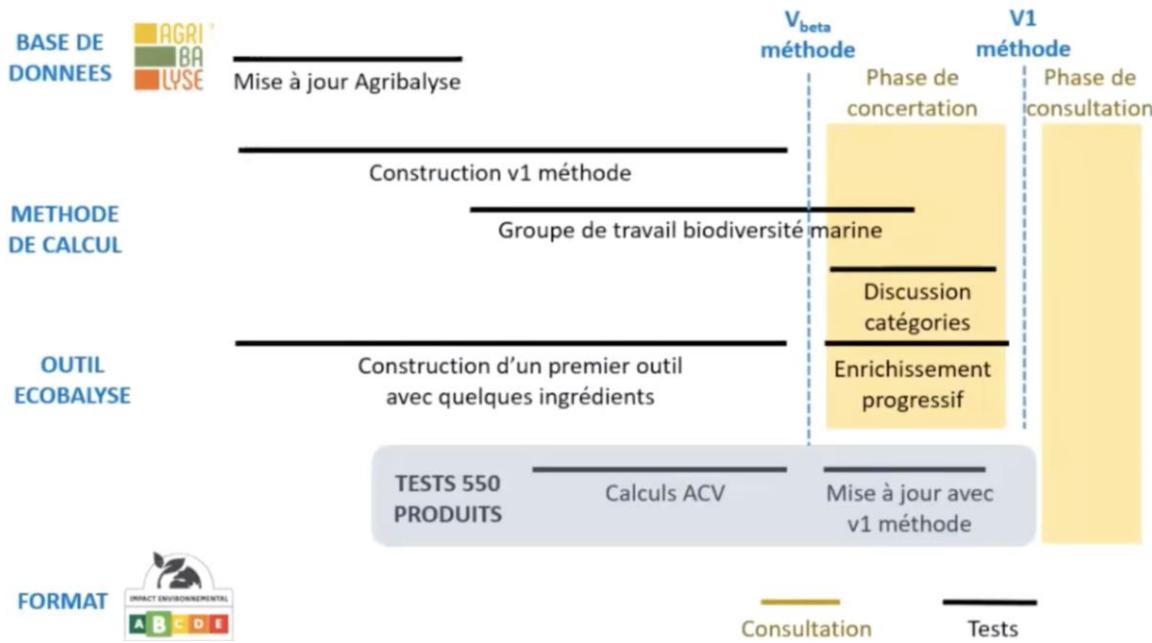
Calendrier

- 2020-2021 : expérimentations
 - 18 expérimentations (dont ecoscore et planetscore)
 - Comité de pilotage (Ademe & Ministères, président du Conseil Scientifique)
 - Comité des parties prenantes
 - Groupe de travail “indicateurs”
 - Conseil Scientifique
- Fin 2021 : rapport du conseil scientifique
 - ->Un affichage opérationnel des produits alimentaires est faisable et pertinent
 - Réponses à 6 questions
- Début 2022 : rapport du gouvernement
 - « Majoritairement » en accord avec le rapport du CS
 - Choix et feuille de route
- 2023

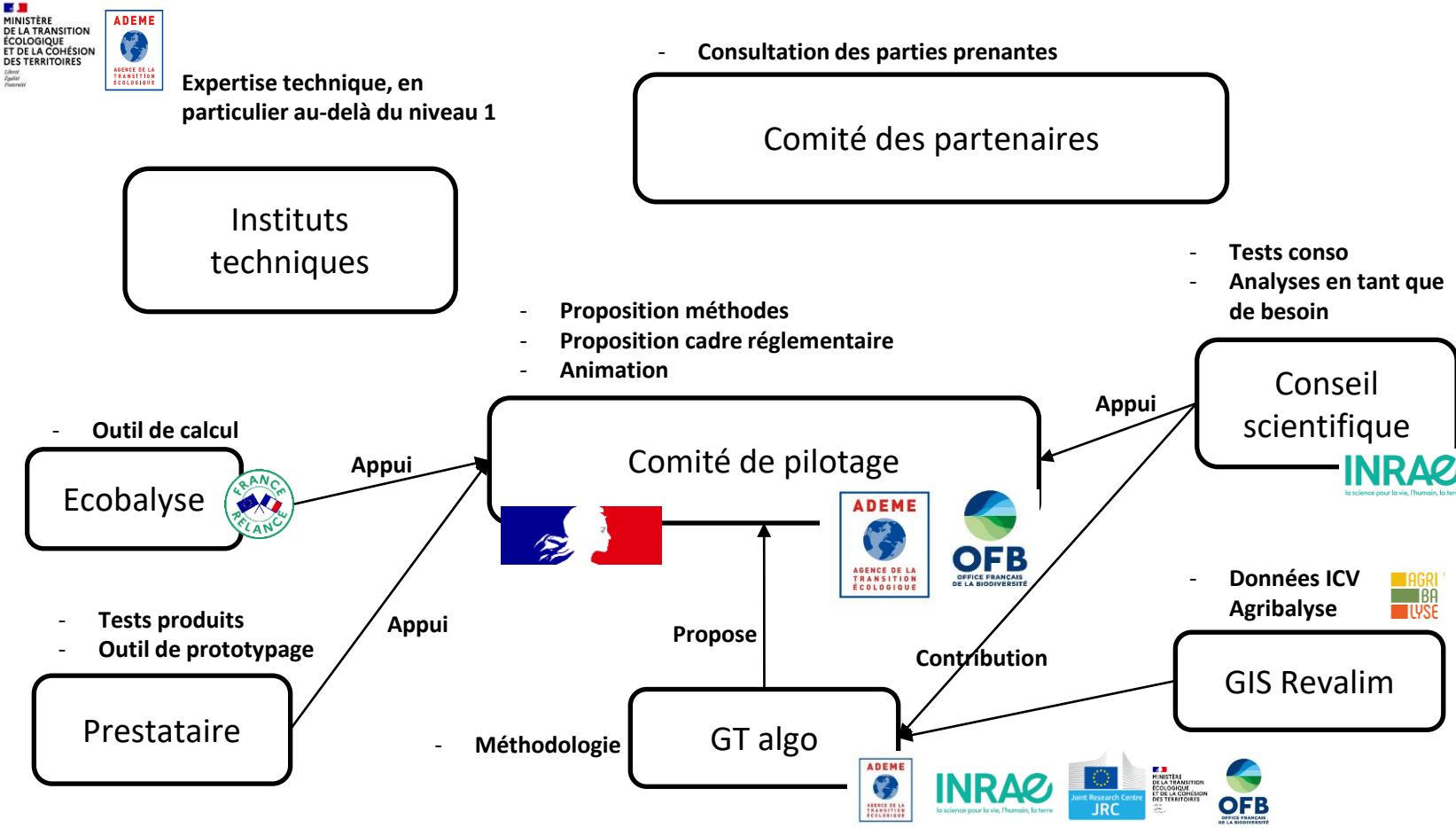
2023



Calendrier



Une organisation complexe...



Calendrier

- 2020-2021 : expérimentations
 - 18 expérimentations (dont ecoscore et planetscore)
 - Comité de pilotage (Ademe & Ministères, président du Conseil Scientifique)
 - Comité des parties prenantes
 - Groupe de travail “indicateurs”
 - Conseil Scientifique
- Fin 2021 : rapport du conseil scientifique
 - ->Un affichage opérationnel des produits alimentaires est faisable et pertinent
 - **Réponses à 6 questions**
- Début 2022 : rapport du gouvernement
 - « Majoritairement » en accord avec le rapport du CS
 - Choix et feuille de route
- 2023



INRAE



A.Hélrias¹, HMG van der Werf²,
LG Soler³, Faggerl⁴, JV Dourmad⁵,
Cujular⁶, LNbed⁷, SP Salterini⁸,
Brajiffieux⁹, Ghystrami¹⁰,
Léonard¹¹, Léonard Agro, Rennes, FR
Hélrias, A., INRAE, Institut National de la Recherche Agronomique, FR
van der Werf, H.M.G., INRAE, Institut National de la Recherche Agronomique, FR
Soler, L.G., Institut National de la Recherche Agronomique, Paris, France
Faggerl, M., University of Innsbruck, Austria
Dourmad, J.V., Institut Agro, Saint-Gilles, FR
Cujular, I., Institut National de la Recherche Agronomique, Paris, France
LNbed, L., Institut National de la Recherche Agronomique, Paris, France
SP Salterini, S., Institut National de la Recherche Agronomique, Paris, France
Brajiffieux, C., Institut National de la Recherche Agronomique, Paris, France
Ghystrami, R., Institut National de la Recherche Agronomique, Paris, France

② Objectives?

Highlight differences in impact **within each food category** and **between food categories**

③ Data?

- "Semi-specific" approach between generic low-cost and specific high-cost specific data
- **Several stakeholders** (companies & digital app providers).

⑤ Environmental scores?

- **Scale** can be changed (for a relatively used scale) but should be argued and **transparent**
- **Non-LCA indicators** may be an option for **topics poorly described** but food-environment relationship **distortion**. Acceptable to highlight actions consistent with public policy priorities (like in the EU "Farm-to-Fork" strategy).

⑥ Label format?

- Front-of-pack label, **colour-coded** schemes, **five-level** ordinal scale
- Intra-categories? -> More levels / additional numerical value / sub-scores, but **additional information** vs detrimental effects.

Take-home Message

The existence of the **PEF**, inventory data in the **AGRIBALYSE** and the answers to the above questions -> **LCA** can be operationalized for **environmental labelling**. Informing consumers about environmental impacts is therefore possible and a step forward in **minimizing** the human **impact** on nature.

Associated paper:

Hélrias A, van der Werf HMG, Soler L-G, et al (2022)
Implementing environmental labelling of food products in France. Int J Life Cycle Assess 27:926–931.
<https://doi.org/10.1007/s11367-022-02071-8>



AH(1) HMG van der Werf,
LGS(1) Fagot J-YDumas,
CLM(1) Pellerin,
BRUE(1) G Vautier
BIP(1) M. Gobet, G. Gobet
BIP(1) M. Gobet, G. Gobet

INRAE



Towards Environmental Labelling of Food Products in France

- The French government wants an environmental labelling system for food products. A multidisciplinary **scientific council** was set. Here its main outcomes through **six questions**.

① Environmental issues?

- LCA is the most **appropriate** and legitimate methodological framework.
- Health impacts of **contaminants in foods** -> major concern but **regulatory constraints** before

② Objectives?

- Highlight differences in impact **within each food category** and **between food categories**

③ Data?

- "**Semi-specific**" approach, between generic low-cost and specific high-cost specific data
- Several stakeholders** (companies & digital app providers).

④ Methods?

- EF method** -> structured & institutionally validated
- Potential improvements: (1) **soil carbon** stock variations
- (2) Tox. and ecotox. **100-yr horizon** (balance organic-inorganic substances.)
- (3) agricultural practices and biodiversity -> new impact category "**field-level biodiversity**".

⑤ Environmental scores?

- Scale can be changed (for a relatively used scale) but should be argued and **transparent**
- Non-LCA indicators may be an option for **topics poorly described** but food-environment relationship **distortion**. Acceptable to highlight actions consistent with public policy priorities (like in the EU "Farm-to-Fork" strategy).

⑥ Label format?

- Front-of-pack label, **colour-coded** schemes, **five-level** ordinal scale
- Intra-categories ? -> More levels / additional numerical value / sub-scores, but **additional information** vs detrimental effects.

Take-home Message

The existence of the **PEF**, inventory data in the **AGRIBALYSE** and the answers to the above questions -> **LCA** can be operationalized for **environmental labelling**. Informing consumers about environmental impacts is therefore possible and a step forward in **minimizing the human impact** on nature.

Associated paper:

Hélias A, van der Werf HMG, Soler L-G, et al (2022)
Implementing environmental labelling of food products in France. Int J Life Cycle Assess 27:926–931.
<https://doi.org/10.1007/s11367-022-02071-8>

② Objectives?

Highlight differences in impact **within each food category** and **between food categories**

③ Data?

- "Semi-specific" approach.** between generic low-cost and specific high-cost specific data
- Several stakeholders** (companies & digital app providers).



23/03 :

- niveau 1 générique -> <https://ecobalyse.beta.gouv.fr/#/food/build>
- niveau 2 semi-spécifique
- niveau 3 spécifique

① Environmental issues?

- LCA is the most **appropriate** and legitimate methodological framework.
- Health impacts of **contaminants in foods** -> major concern but **regulatory constraints** before

④ Methods?

- EF method** -> structured & institutionally validated
- Potential improvements: (1) **soil carbon** stock variations
- (2) Tox. and ecotox. **100-yr horizon** (balance organic-inorganic substances.)
- (3) agricultural practices and biodiversity -> new impact category "**field-level biodiversity**".



23/03 : Cohérence des choix



T
F
O
P
T
L
G
A
J
C
N
S
B
R
G
T
Y
H
M
W
D
P
A
E
K
P
A
M
I
U
C
P
G
C
D
E
R
G
P

② Objectives?

Highlight differences in impact **within each food category **and between** food categories**

③ Data?

- "Semi-specific" approach, between generic low-cost and specific high-cost specific data
- **Several stakeholders** (companies & digital app providers).

⑤ Environmental scores?

- **Scale** can be changed (for a relatively fully used scale) but should be argued and **transparent**
- **Non-LCA indicators** may be an option for **topics poorly described** but food-environment relationship **distortion**. Acceptable to highlight actions consistent with public policy priorities (like in the EU "Farm-to-Fork" strategy).

⑥ Label format?

Take-home Message

The existence of the PEF, inventory data in the AGRIBALYSE and the answers to the above questions -> LCA can be operationalized for environmental labelling. Informing consumers about environmental impacts is therefore possible and a step forward in minimizing the human impact on nature.

> Associated paper:

Associated paper:
Hélias A, van der Werf HMG, Soler L-G, et al (2022) Implementing environmental labelling of food products in France. *Int J Life Cycle Assess* 27:926–931.
<https://doi.org/10.1007/s11367-022-02071-8>



Towards Environmental Labelling of Food Products in France

- The French government wants an environmental labelling system for food products. A multidisciplinary **scientific council** was set. Here its main outcomes through **six questions**.

① Environmental issues?

- LCA is the most **appropriate** and legitimate methodological framework.
 - Health impacts of **contaminants in foods** -> LCA

④ Methods?

- EF method** -> structured & institutionally validated
Potential improvements: (1) **soil carbon** stock variations
(2) Tox. and ecotox. **100-yr horizon** (balance organic-inorganic substances). (3) agricultural practices and biodiversity -> new impact category **"field-level biodiversity"**.

⑤ Environmental scores?

- o **Scale** can be changed (for a relatively used scale) but should be argued and **transparent**
 - o **Non-LCA indicators** may an option for **topics poorly described** but food-environment relationship **distortion** Acceptable to highlight actions consistent with public policy priorities (like in the EU 'Farm-to-Fork' strategy)

⑥ Label format?

- o Front-of-pack label, colour-coded schemes, five-level ordinal scale
 - o Intra-categories ? -> More levels / additional numerical value / sub-scores, but additional information vs detrimental effects.

Take-home Message

The existence of the PEF, inventory data in the AGRIBALYSE and the answers to the above questions -> LCA can be operationalized for environmental labelling. Informing consumers about environmental impacts is therefore possible and a step forward in minimizing the human impact on nature.

⑤ Environmental scores?

- **Scale** can be changed (for a relatively fully used scale) but should be argued and **transparent**

- **Non-LCA indicators** may be an option for **topics poorly described** but food-environment relationship **distortion**. Acceptable to highlight actions consistent with public policy priorities (like in the EU "Farm-to-Fork" strategy).

⑥ Label format?

- Front-of-pack label, **colour-coded** schemes, **five-level** ordinal scale
 - Intra-categories ? -> More levels / additional numerical value / sub-scores, but **additional information** vs detrimental effects.

23/03 : Modulation selon la surface pour « externalités »

- Infrastructures agro-écologiques
 - Diversification agricole
 - Bien-être animal

Sourcing « durable »

- Pour les entreprises françaises qui importent en grande quantité des matières premières agricoles de l'étranger ➔ quelle(s) origine(s) pour minimiser les impacts environnementaux négatifs importés ?
- Données de référence par défaut présentes dans AGRIBALYSE

Cocoa beans, sun-dried, agroforestry, at farm (BR) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, agroforestry, at farm (CO) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, agroforestry, at farm (CM) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, agroforestry, at farm (EC) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, agroforestry, at farm (GH) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, agroforestry, at farm (ID) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, at farm (GLQ) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, extreme & high inputs, at farm (BR) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, extreme high inputs, at farm (CO) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, extreme high inputs, at farm (EC) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, improved practices, at farm (CO) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, improved practices, at farm (CM) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, improved practices, at farm (GH) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, low inputs, at farm (CO) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, low inputs, at farm (CM) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, low inputs, at farm (GH) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, medium inputs, at farm (BR) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, medium inputs, at farm (EC) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, medium inputs, at farm (ID) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, medium inputs, at farm (GLQ) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, medium production mix, at farm (BR) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, production mix, at farm (CO) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, production mix, at farm (EC) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, production mix, at farm (GH) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, production mix, at farm (ID) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit
Cocoa beans, sun-dried, production mix, at farm (GLQ) - Adapted from WFLDB U	kg	not defined	AGRIBALYSE - Unit



Agroforesterie /
systèmes extensifs
/ monocultures
intensives



Photos © : Claire Lanaud / Philippe Lachenaud

- Pour se différencier, possibilité de se faire accompagner pour utiliser les données 100% spécifiques de votre chaîne de valeur, notamment sur la partie production agricole & transformations alimentaires ou non alimentaires