A SUPPLEMENTARY MATERIALS

Supplementary Text 1: Data on plot and farming systems

Data was provided by Natalia Murugarren from INTIASA:

Kc ini: 0.5; Kc mid: 1.15; Kc fin: 0.5.

Number of days: Initial (Lini): 90; Development (Ldev): 45; Mid-season (Lmid): 40; Final (Lfin): 60; Total: 235.

Supplementary Table S1: Conversion factor sources for the different energy sources used during the snack production

Energy source	**WF conversion factor source**	**CF conversion factor source**
Solar	Hardy et al. (2010)	MITECO (2022)
Mini-hydroelectric[1]	Hardy et al. (2010)	MITECO (2022)
Cogeneration	Hardy et al. (2010)	MITECO (2022)
Gas[2]	Macknick et al. (2012)	MITECO (2022)
Wind power	Mekonnen et al. (2015)	MITECO (2022)
Hydroelectric	Hardy et al. (2010)	MITECO (2022)
Nuclear	Hardy et al. (2010)	MITECO (2022)

[1] Mini hydroelectric plants have been considered as normal hydroelectric plants, with minimum levels of water consumption.
[2] Natural gas combined cycles.
[3] Average data for Spain, except for wind energy and combined cycle gas, whose data are global averages.

Supplementary Table **Error! No text of specified style in document.**S2: Ingredients, origins and factors used in the calculation of the water footprint

Ingredients	**Source**	**WF conversion factor source**	**Comments/Data base label**
Water	Esquiroz		
Sunflower oil 1000 l.	Spain, Argentina, Romania, Ukraine	Mekonnen and Hoekstra (2011)	Average of Spain, Argentina, Rumania, Ukraine. Average of sunflower-seed or safflower oil, crude (151211)
Fried onions 10x10 (*Allium cepa)*	Alicante	Mekonnen and Hoekstra (2011)	Valencian community. Average of onions and shallots, fresh or chilled (070310) and onions, provisionally preserved but not suitable for immediate consumption (071110)
Native rice starch bag 20 kg.	Belgium	Mekonnen and Hoekstra (2011)	Global average, rice flour (110230), No data available for Belgium
Curry g.t. 1 kg.	Germany	Mekonnen and Hoekstra (2011)	Global average, Curry (91050). No data available for Germany
Salt	Tarragona		Sea salt is assumed
Sugar 20 kg bag	Spain	Mekonnen and hoekstra (2011)	Country average. refined sugar, in solid form, nes (170199)
Garlic frozen and diced 3x3 10 kg. (*Allium sativum*)	China	Mekonnen and hoekstra (2011)	Country average. garlic fresh or chilled (070320)
Cumin 5 kg. (*Comicum cymimum*)	India	Mekonnen and hoekstra (2011)	Country average. spices nes (091099)
Black pepper powder bag 5 kg.	India	Mekonnen and hoekstra (2011)	Country average. pepper of the genus piper, except cubeb pepper, crushed or ground (090412)
Curcuma powder 5 kg.	India	Mekonnen and hoekstra (2011)	Curcuma (91030)
Cinnamon powder 1kg. (*Cinnamomum verum*)	Vietnam	Mekonnen and hoekstra (2011)	Global average, cinnamon and cinnamon-tree flowers crushed or ground (090620). No data available for Vietnam
Coriander powder 1 kg. (*Coriandrum sativum*)	Morocco, Egypt	Mekonnen and hoekstra (2011)	Country average. coriander seeds (090920)
Sanygran extruded pea	Tudela	ALISSEC	
Cooked white rice pack, thaibonet similar	Azagra	Zubieta (2019)	Region 4, Ribera alta. Navarra
Carrot 6x6 10 kg. (*Capsicum nahum*)	Azagra	Mekonnen and hoekstra (2011)	Navarra. carrots and turnips, fresh or chilled (070610)
Zucchini 10x10 (*Curcubida pepo*)	Azagra	Mekonnen and hoekstra (2011)	Navarra. pumpkins, squash and gourds (070990_b)

Supplementary Table S3: Ingredients, origins and factor source used in the calculation of the carbon footprint

Ingredients	**Source**	**CF conversion factor source**	**Comments/ Data base label**
Water	Esquiroz	Mancomunidad de Pamplona (2021)	Drinking water supply
Sunflower oil 1000 l.	Spain, Argentina, Romania, Ukraine	ADEME (2023)	Huile de tournesol. France continentale
Fried onions 10x10 (*Allium cepa)*	Alicante	ADEME (2023)	Oignon/cuit. France continentale
Native rice starch bag 20 kg.	Belgium	ADEME (2023)	Farine de riz. France continentale
Curry g.t. 1 kg.	Germany	ADEME (2023)	Curry/poudre. France continentale
Salt	Tarragona	ADEME (2023)	Sel blanc alimentaire/non iodé/non fluoré (marin ignigène ou gemme). France continentale
Sugar 20 kg bag	Spain	ADEME (2023)	Sucre blanc. France continentale
Garlic frozen and diced 3x3 10 kg. (*Allium sativum*)	China	ADEME (2023)	Ail/cru. France continentale
Cumin 5 kg. (*Comicum cymimum*)	India	ADEME (2023)	Cumin/graine. France continentale
Black pepper powder bag 5 kg.	India	ADEME (2023)	Poivre noir/poudre
Curcuma powder 5 kg.	India	Carbon cloud (2023)	Turmeric powder. India
Cinnamon powder 1kg. (*Cinnamomum verum*)	Vietnam	ADEME (2023)	Cannelle/poudre. France continentale
Coriander powder 1 kg. (*Coriandrum sativum*)	Morocco, Egypt	ADEME (2023)	Coriandre/graine. France continentale
Sanygran extruded pea	Tudela	ALISSEC	
Cooked white rice pack, thaibonet similar	Azagra	ADEME (2023)	Riz blanc/cuit/non salé. France continentale
Carrot 6x6 10 kg. (*Capsicum nahum*)	Azagra	ADEME (2023)	Carotte conventionnelle/moyenne nationale/à la ferme/FR U. France continentale
Zucchini 10x10 (*Curcubida pepo*)	Azagra	ADEME (2023)	Courgette conventionnelle/moyenne nationale/à la ferme/FR U. France continentale

Supplementary Table S4: Packaging materials, origins, factor source and part of the packaging of the packaging used in the calculation of the carbon and water footprint

Material	**Source**	**CF conversion factor source**	**WF conversion factor source**	**Part of the packaging**
White cardboard lid	Huarte	ADEME (2023)	Schyns et al. (2017)	Lid
Cardboard tray white lasagne 500 BAIC2	Huarte	ADEME (2023)	Schyns et al. (2017)	Tray
Recycled european pallet	Yarnoz	ADEME (2023)	Schyns et al. (2017)	Pallet