

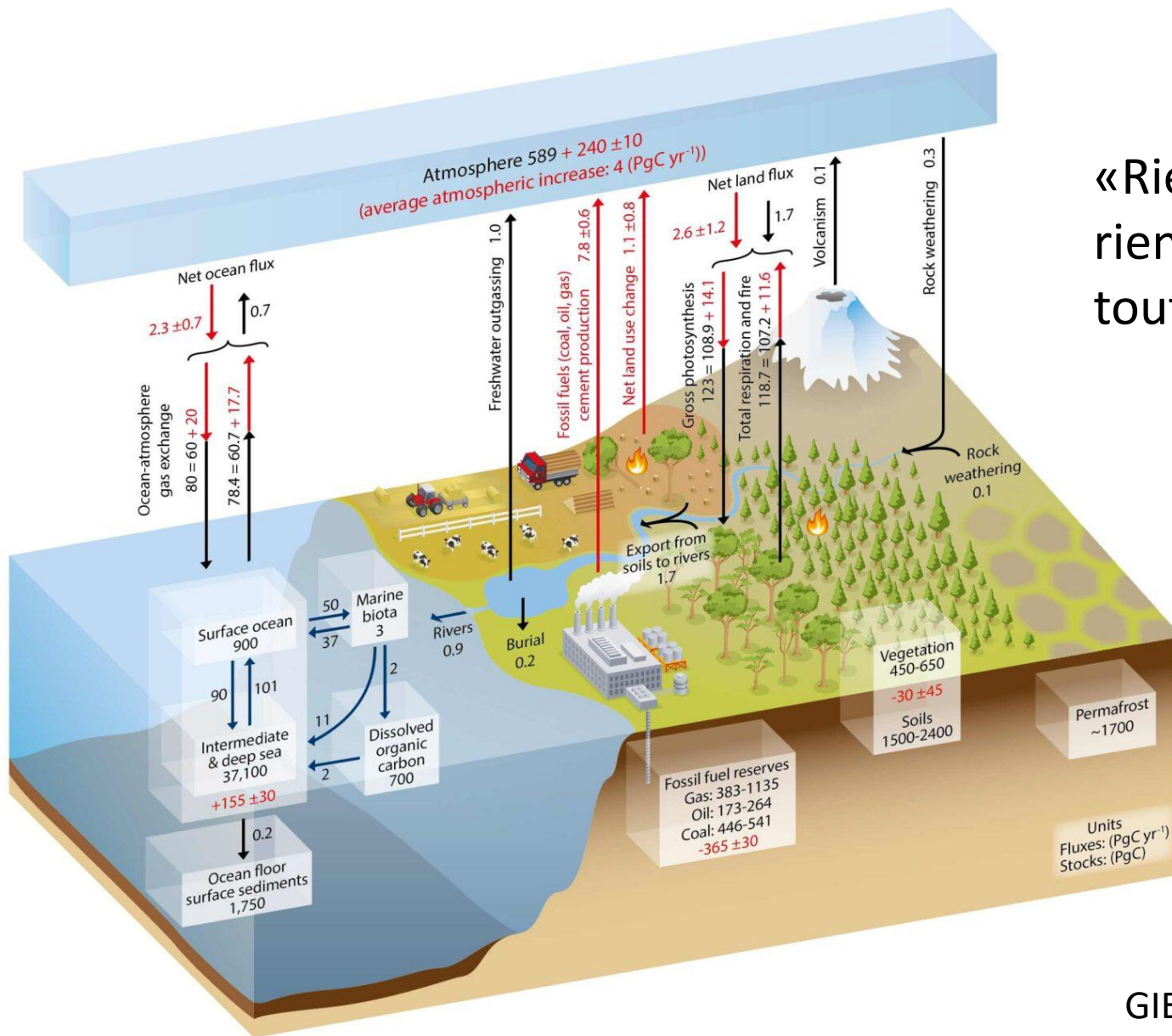
# Projet de valorisation CO<sub>2</sub>

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haute école de viticulture et œnologie | école supérieure de technicien/ne vitivinicole | école du vin

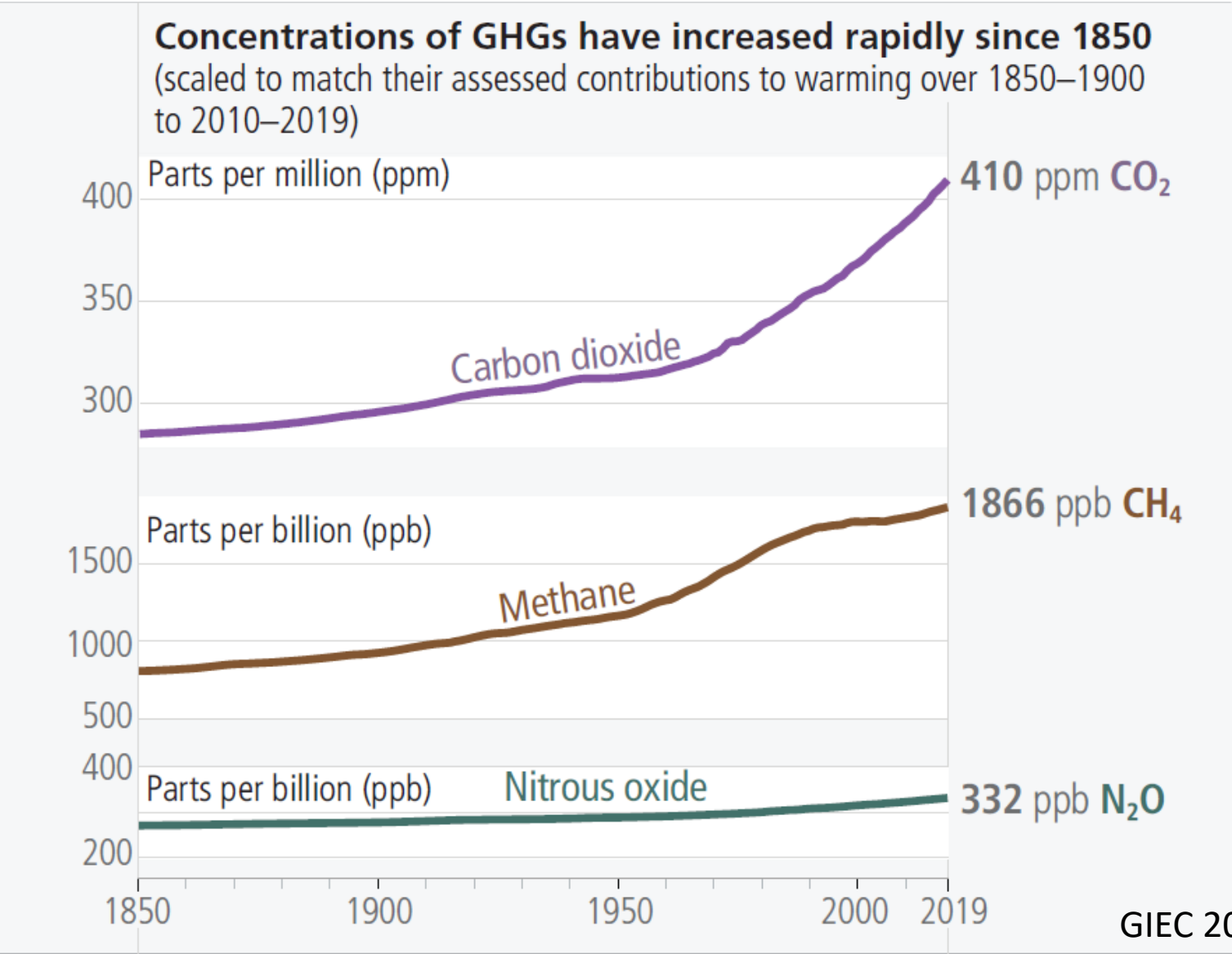
# Cycle du carbone



«Rien ne se perd,  
rien ne se crée,  
tout se transforme»

Lavoisier

# Cycle du carbone

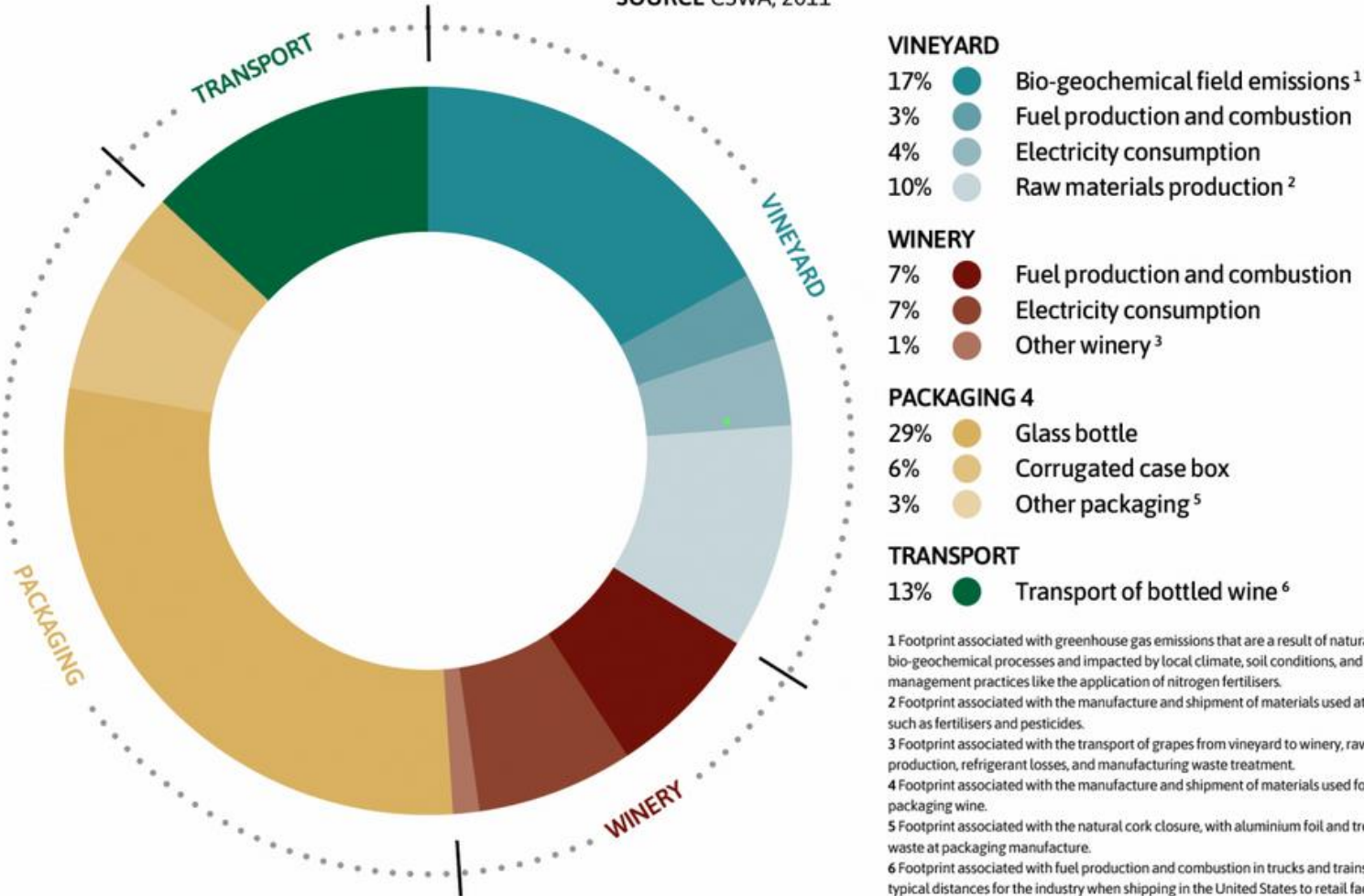


# Empreinte carbone

1 bouteille 0,75l = environ 1,5 Kg eq CO<sub>2</sub>

## Relative impacts for the carbon footprint of packaged wine

SOURCE CSWA, 2011



1 Footprint associated with greenhouse gas emissions that are a result of natural bio-geochemical processes and impacted by local climate, soil conditions, and management practices like the application of nitrogen fertilisers.  
 2 Footprint associated with the manufacture and shipment of materials used at a vineyard such as fertilisers and pesticides.  
 3 Footprint associated with the transport of grapes from vineyard to winery, raw material production, refrigerant losses, and manufacturing waste treatment.  
 4 Footprint associated with the manufacture and shipment of materials used for packaging wine.  
 5 Footprint associated with the natural cork closure, with aluminium foil and treatment of waste at packaging manufacture.  
 6 Footprint associated with fuel production and combustion in trucks and trains based on typical distances for the industry when shipping in the United States to retail facilities.

# Conditionnement



## CARBON FOOTPRINT OF WINE PACKAGING

When choosing a drink, think about packaging too



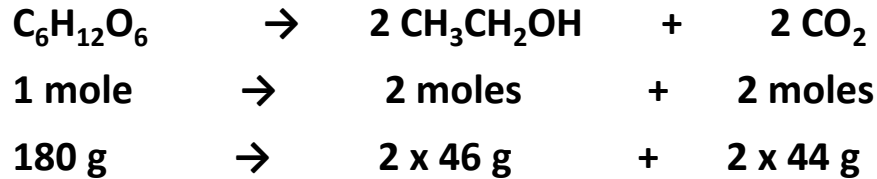
Figures taken from a study carried out for Alko

\*Please Note - The Alko study did not use our Paper Bottle to calculate the statistics about Paper Bottles, this value was calculated and provided by the manufacturer.



# Aspects fermentaires

## fermentation alcoolique



1 g glucose  
ou fructose

0.489 g de CO<sub>2</sub>  
0.249 litres CO<sub>2</sub> (STP)

1 l de moût (83°Oe = 200 g sucre/l) →

{ 97.8 g CO<sub>2</sub>  
49.8 l CO<sub>2</sub> (STP)

Pour obtenir 1% V/V, on libère 8,313 g de CO<sub>2</sub>



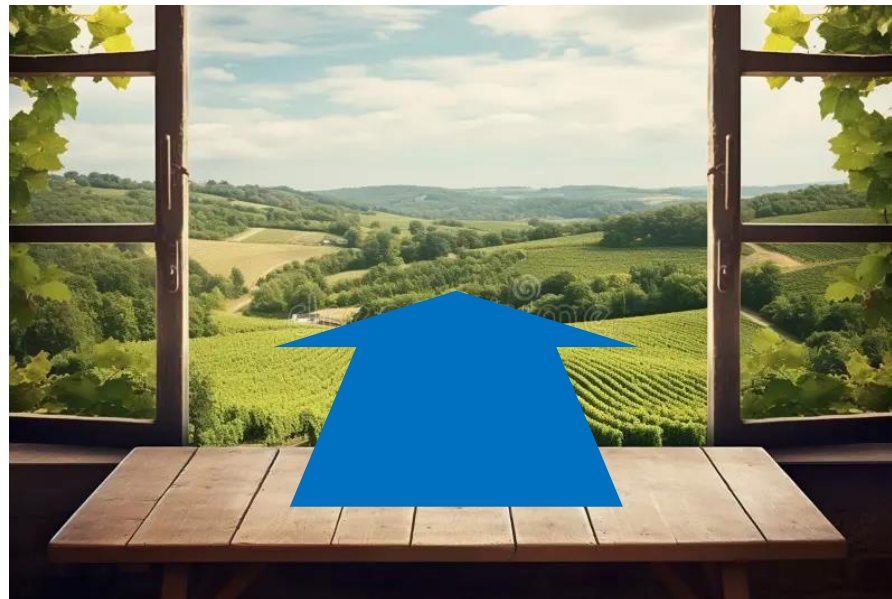
Notion de  
puit de Carbone

# Aspects fermentaires

Pour obtenir 1% V/V, on libère 8,313 g de CO<sub>2</sub>

## Suisse

Vin: 9 700 tonnes de CO<sub>2</sub> /an  
Bière: 15 230 tonnes de CO<sub>2</sub> /an  
Spiritueux: 1 800 tonnes de CO<sub>2</sub> /an





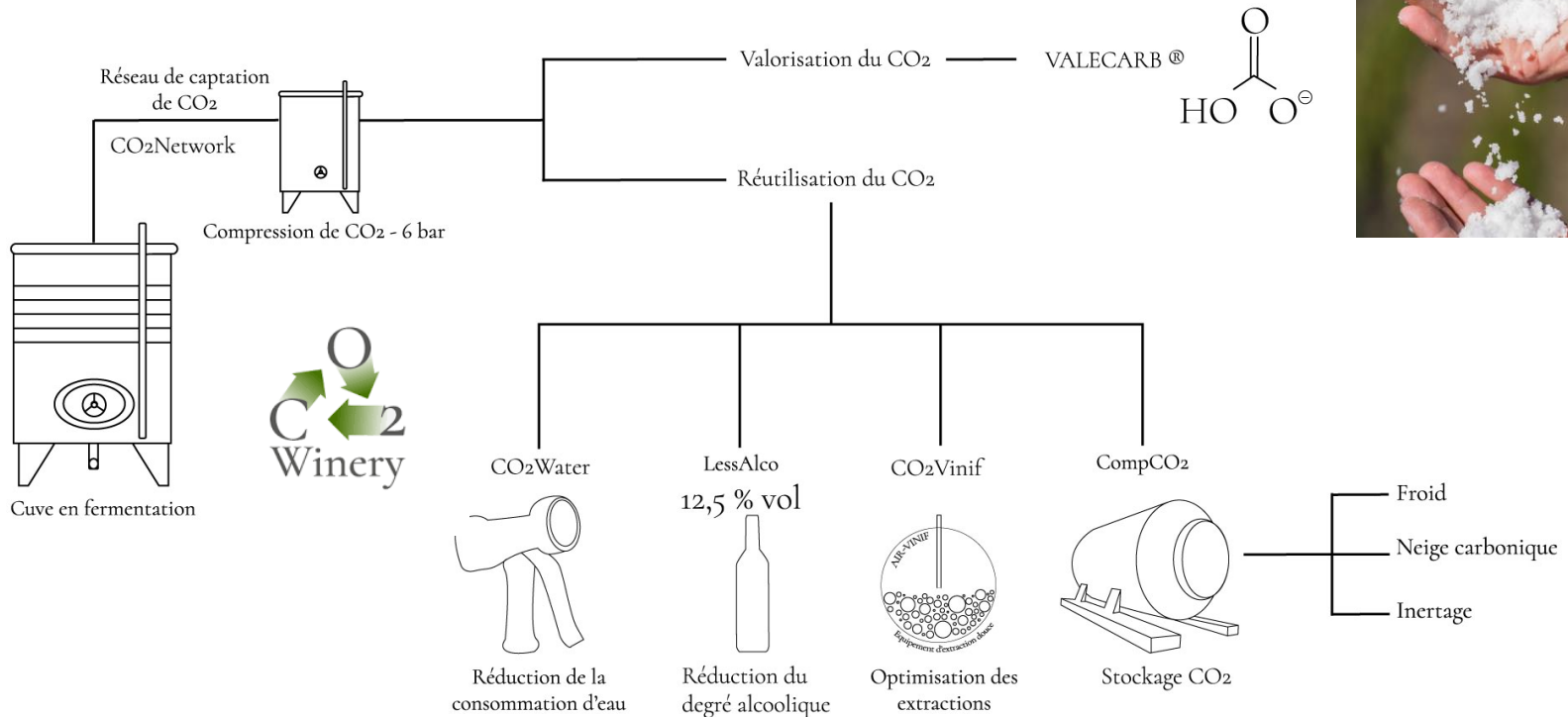








*Château Montrose*



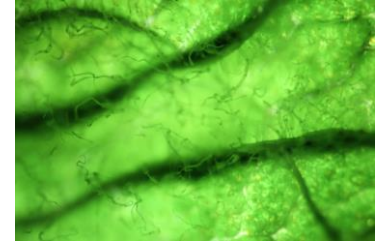
# Autre possibilité

## Microalgues

Possibilité de production d'un large éventail de produits à haute valeur ajoutée, y compris des aliments, des aliments pour animaux, des produits nutraceutiques, des fertilisants ainsi que des biocarburants.



CHANGINS

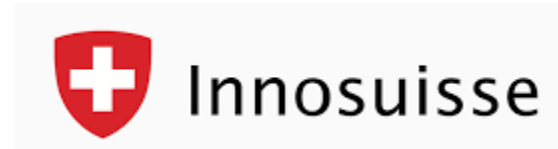






Bouygues Construction

# Projet terminé



# Projet en cours de dépôt

- Desalcoolisation
- Gestion du risque brettanomyces
- ...