

Circular by Nature

Pathways to climate neutral and circular glass packaging

Vidro+ Launch event 24 May 2022

Adeline Farrelly, Secretary General, FEVE –
European container glass federation

THE EUROPEAN CONTAINER GLASS INDUSTRY

Our industry in numbers:

- **125,000** jobs (40,000 direct)
- **162** plants in 23 countries
- **>80 billion** products
- FEVE represents over **90%** of the European glass container manufacturing industry
- **€600 million** invested annually in energy efficiency, decarbonisation and upgrades
- Products packed in glass: **€250 billion** contribution to EU trade balance



ADVANCING PACKAGING SUSTAINABILITY



Producing fit-for-purpose packaging

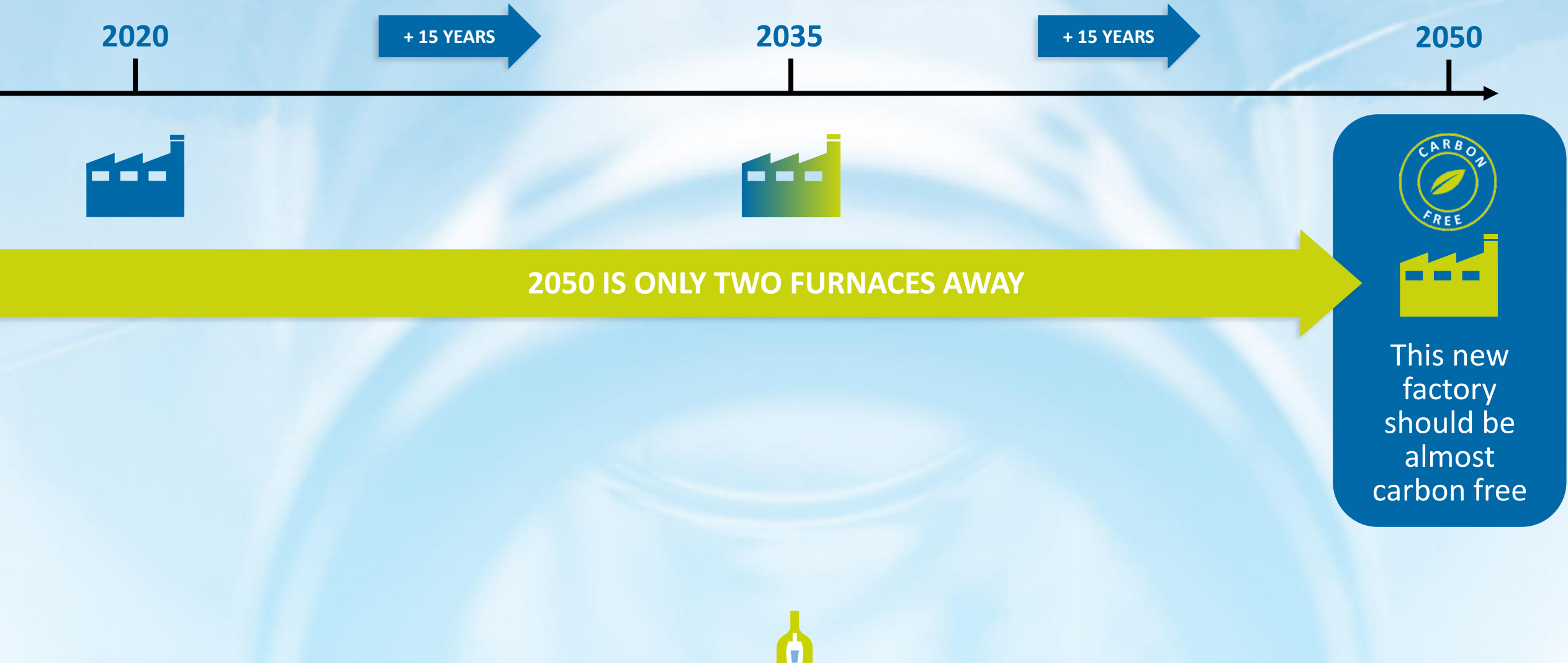


WHAT ARE WE DOING?

OUR ROAD TO CLIMATE NEUTRAL AND FULLY CIRCULAR GLASS PACKAGING



FOR THE GLASS INDUSTRY:



IN THE GLASS INDUSTRY, THE CO₂ EMISSIONS COME FROM:



1

Combustion of natural gas :

~80%

Potential solutions:
Electrification, hydrogen, biomass

2

Process emissions from decomposition
of carbonates in the virgin raw materials:

~20%

Potential solution:
more recycled glass in the batch

The Furnaces for the Future



A vision for climate-neutral packaging

Introducing 'Close the Glass Loop'



The European ambition to collect glass
more and better, together



AN ENERGY TRANSITION FOR GLASS MELTING

THE F4F PROJECTS HAVE SEVERAL UNIQUE FEATURES:

2

Will **significantly reduce CO₂ emissions**, by replacing 80% natural gas with renewable electricity.

3

Will be among the world's **first large scale hybrid furnaces**.

4

Capable of melting large quantities of **post consumer glass**.



WE PRODUCE GLASS WHICH IS:

- 100% and infinitely recyclable in a local closed loop system, making recycled glass a **vital resource for new production**
- made from **raw materials** abundant in nature
- **non-toxic** and **inert**
- a **single-layer material** (the only one with no plastic layer needed)
- one of the most effective packaging materials for **protecting food**
- on average, a glass container made in Europe contains **52% post-consumer recycled glass**



ELIMINATING PROCESS EMISSIONS –

REPLACE VIRGIN RAW MATERIALS WITH RECYCLED GLASS “CULLET”

13 CLIMATE
ACTION



THE CHALLENGE



‘Close the Glass Loop’



The European ambition to collect glass
more and better, together





www.glasshallmark.com

- Glass is **inert** and **reusable** and **recyclable**
- We are committed to maintain our leadership in the **Circular Economy** in Europe for packaging and **low-carbon** production to be a fully **fit for purpose** packaging of the future.
- We warmly welcome the launch of **Vidro +** to address the recycling challenge
- Please count on our full support to **work with you** as you aim to close the glass loop in Portugal.

