

RAPID DRYING OF CERAMICS REDUCING ENERGY CONSUMPTION AND CO₂ EMISSIONS WHILE PRESERVING PRODUCT QUALITY

The RAPID DRY project optimised the DRYING OF CERAMIC CAST PIECES



RAW MATERIALS CONSUMPTION
-6%



GAS CONSUMPTION
-67%



ELECTRICITY CONSUMPTION
-86%

These results have been achieved by

■ DEVELOPING A NEW DRYER

■ DEVELOPING NEW CERAMIC SLIPS FORMULATIONS

INDUSTRIAL RESULTS

DRYING CYCLE IN TRADITIONAL DRYER



14h WITH
TRADITIONAL
CERAMIC SLIPS



8h WITH
TRADITIONAL
CERAMIC SLIPS



7h WITH
RAPID DRY
SLIPS

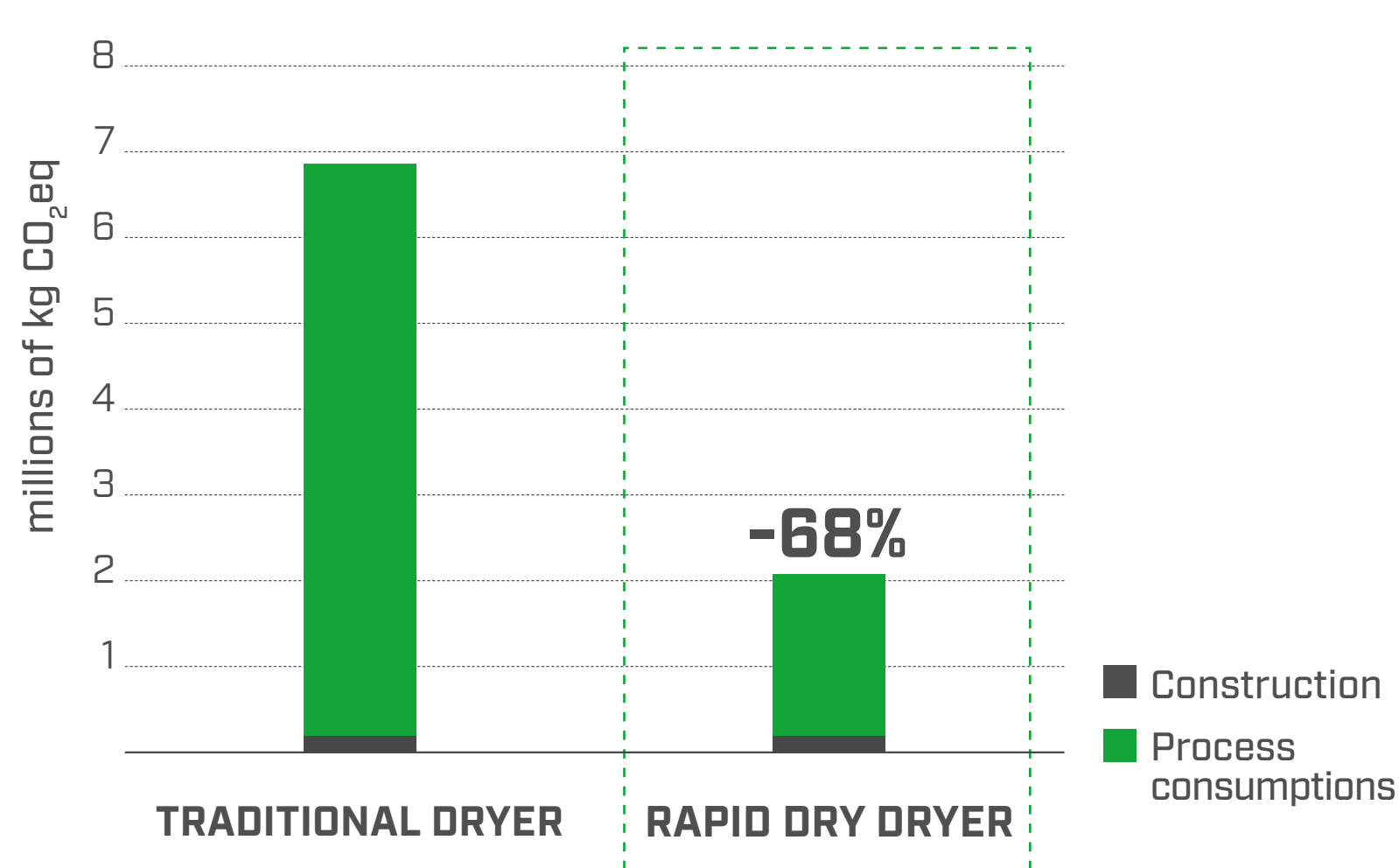


0 DAMAGED
OR BROKEN
PIECES

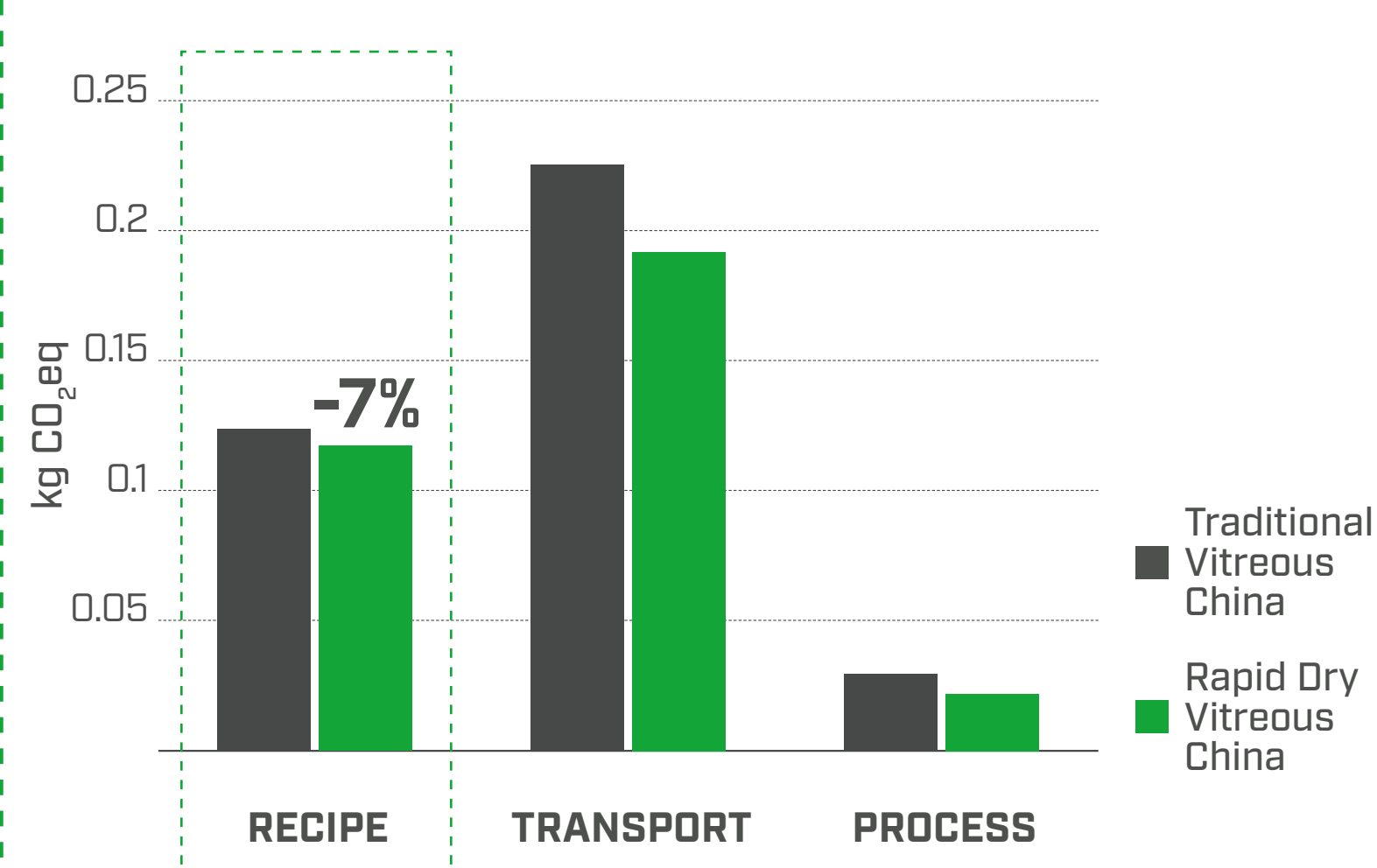
DRYING CYCLE IN NEW RAPID DRY DRYER

ENVIRONMENTAL RESULTS

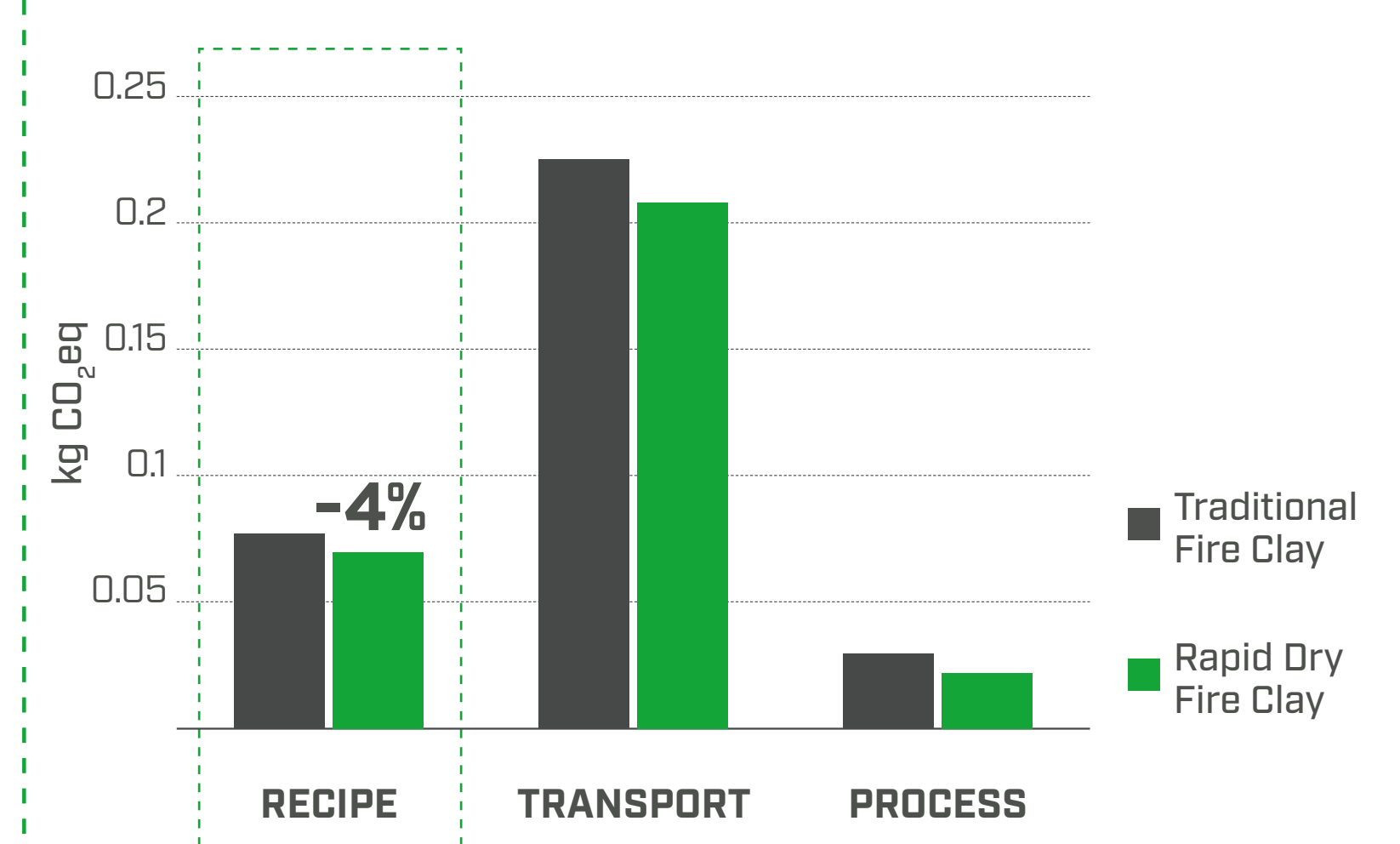
GREENHOUSE GAS EMISSIONS IN THE LIFE CYCLE OF A DRYER (30 YEARS)



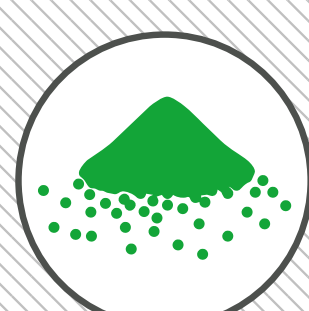
GREENHOUSE GAS EMISSIONS PER 1 kg OF VITREOUS CHINA



GREENHOUSE GAS EMISSIONS PER 1 kg OF FIRE CLAY



ECONOMIC RESULTS



-25%
costs over the life cycle of a
dryer using **RAPID DRY**
VITREOUS CHINA BODIES



-31%
costs over the life cycle of a
dryer using **RAPID DRY**
FIRE CLAY BODIES



-than 1 year
the time needed to repay the
higher investment due to the
purchase of the **NEW RAPID**
DRY DRYER