

Converting the transformation costs to the tonne of basic material results in the **incremental costs (€/t_{BM})**. Incremental costs for investments [ΔCAPEX] can be supported directly or annualised and allocated to the production volume together with the incremental operational cost [ΔOPEX] for energy, raw materials and other operating resources.

Incremental costs (€/t_{BM}) = ΔCAPEX*/t_{BM} + ΔOPEX/t_{BM}

* If ΔCAPEX shall be covered, annualisation is performed using a suitable interest rate over the amortisation period.

The **CO₂ reduction costs** are the quotient of the incremental costs (€/t_{BM}) and the CO₂ reduction resulting from the conversion of production from reference [x] – to low-carbon technology [y].

CO₂ reduction costs (€/t CO₂) = $\frac{\text{Incremental costs (€/t}_{\text{BM}})}{\text{CO}_2 \text{ reduction [x-y] (tCO}_2/\text{t}_{\text{BM}})}$

The projection of the average CO₂ reduction costs yields the **contract price.**

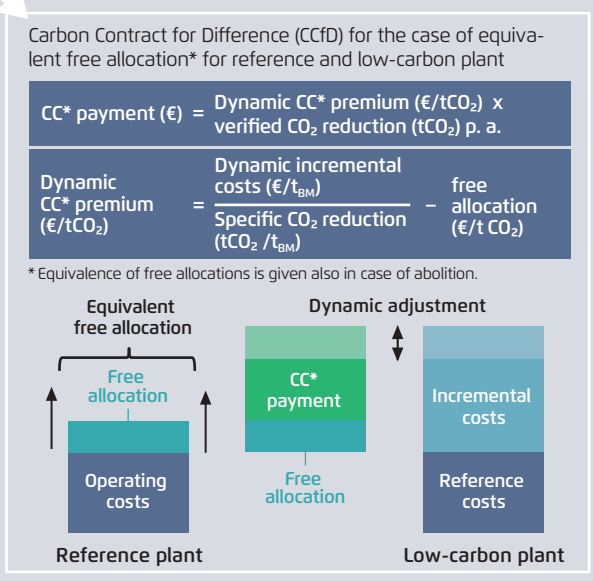
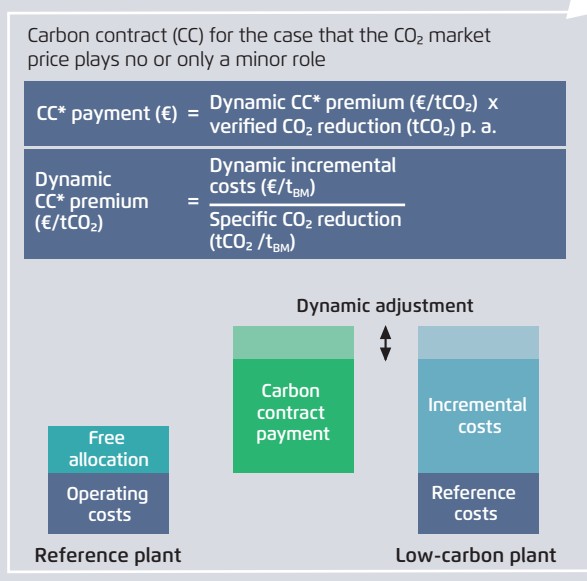
∅ CO₂ reduction costs (€/tCO₂) = Contract price (€/tCO₂)



The contract price is the basis for calculating a dynamic **carbon contract premium**. The dynamic adjustment is intended to compensate for the influence of fluctuating incremental costs.

Dynamic adjustment = F (incremental costs, time)

The carbon contract can take **different forms:**



* CC = carbon contract
Agora Industry, FutureCamp, Wuppertal Institute and Ecologic Institute (2022)