



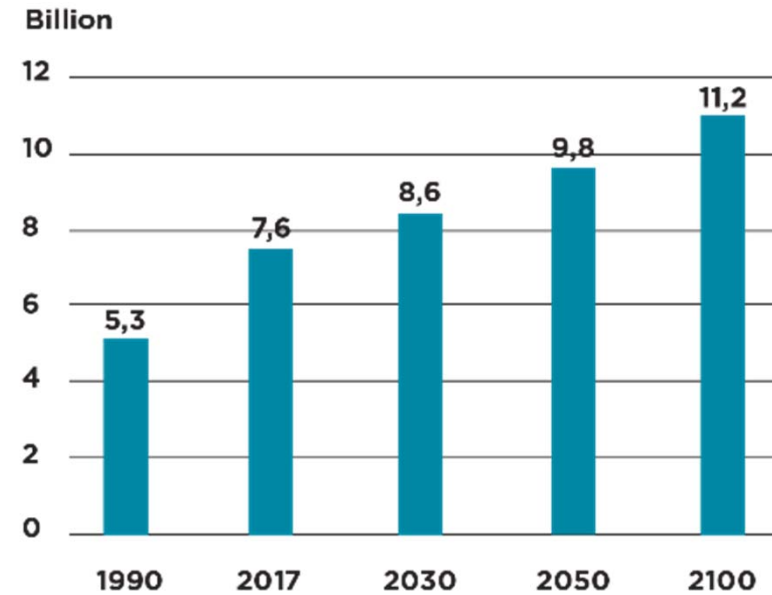
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3 7 13 6 15 3 5 4

P l n d D q w r q h q

Wkh J ædoHghuj | F'kdøhgjh

Wkh j æ do
s r s x æ w l r q l v
j u r z l q j ½

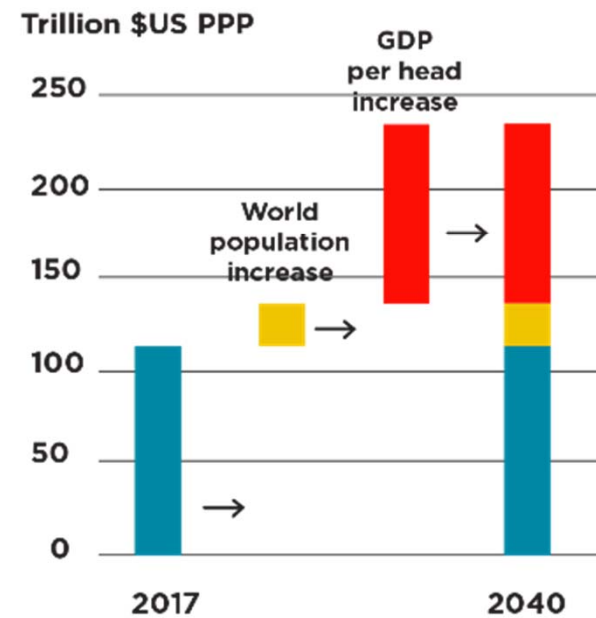
World population



Source: United Nations, World Population Prospects 2014
(Medium variant.)

D qg vr duh
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oly lqj

Increase in global GDP

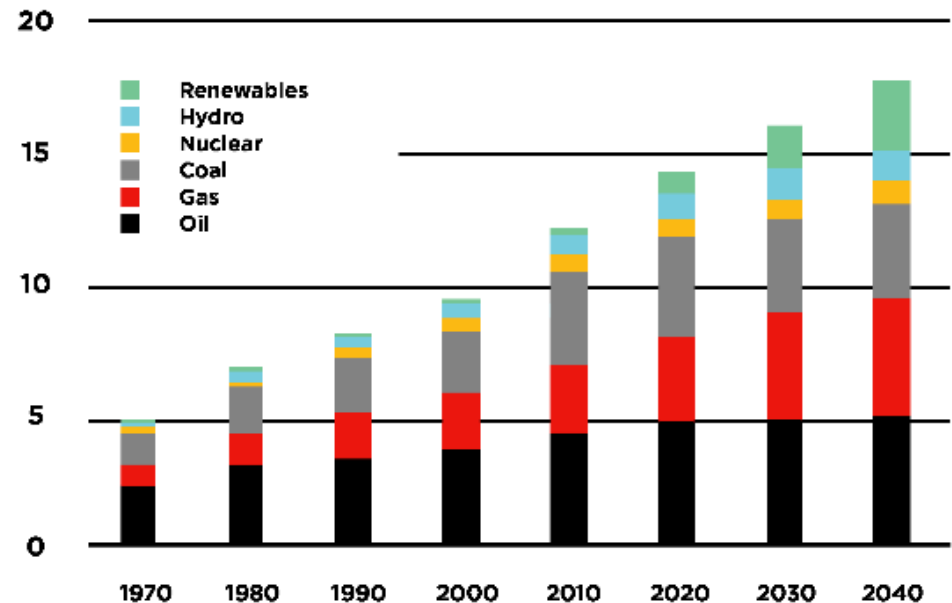


Source: BP Energy Outlook, 2019 Edition

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 wkh vwdqgdug
 ri dylylj / wkh
 klj khu wkh
 hqhu |
 frqvxp swlrq

Primary energy demand - fuel

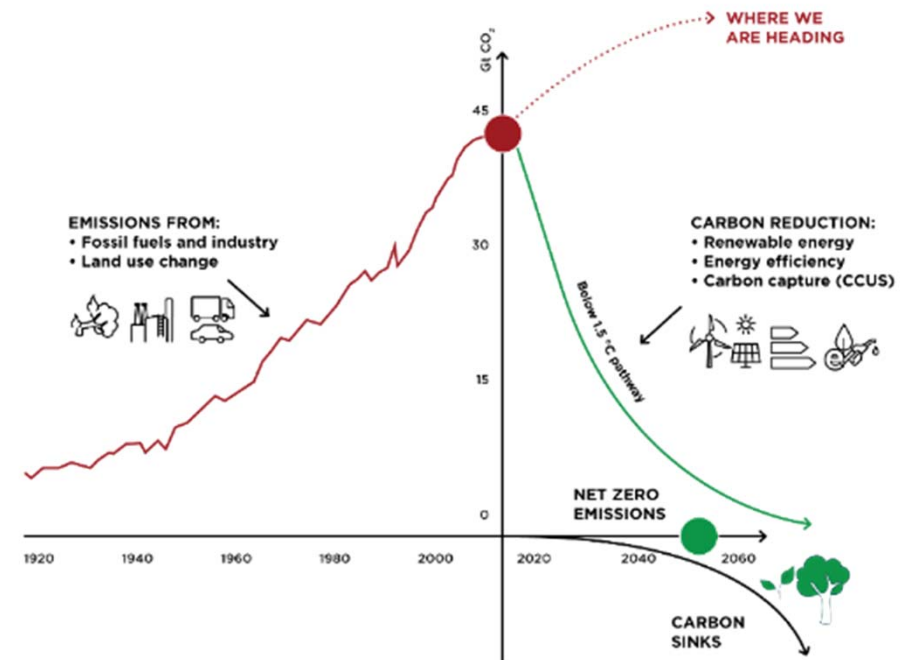
Billion toe



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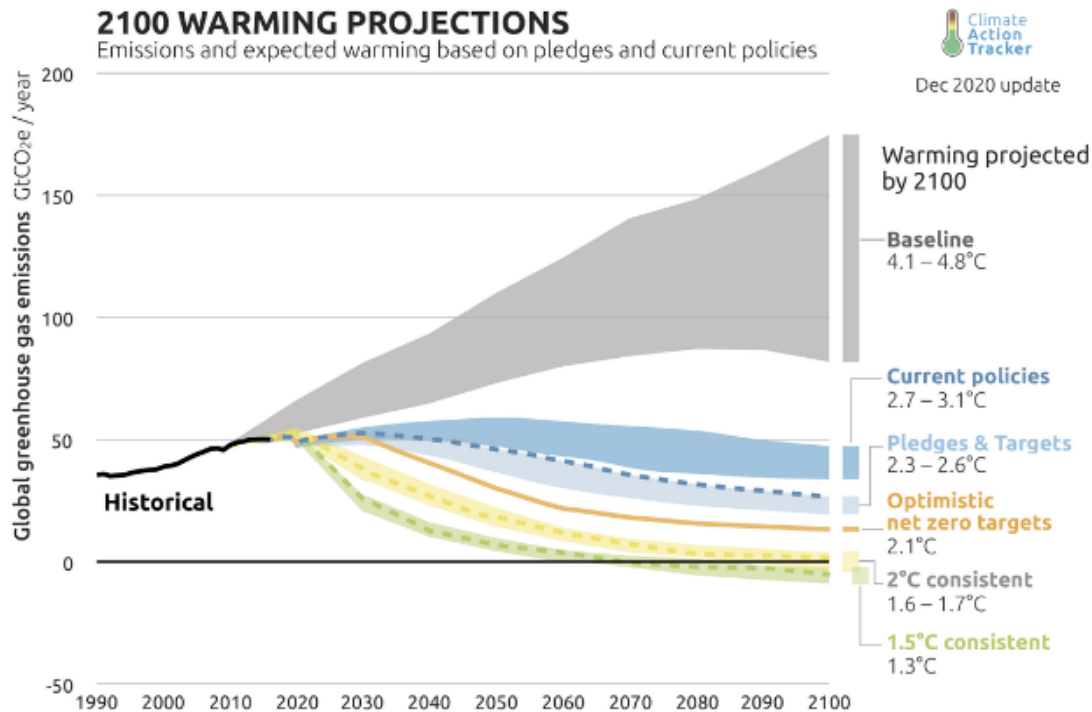
Z khuh z h dūh
j r lqj yv1
z khuh z h
vkrxog j r

ILLUSTRATIVE PATHWAY OF GLOBAL NET CO₂ EMISSIONS LIMITING GLOBAL WARMING TO 1.5 °C



Vrxufh=J ædoF dærq exgjhw53 4/IDWD VVS G dwdedvh/
VVS504< dqg VVS50ædvhdqgh vfhqduŕv

Hyhqw kh æfngrrz q | hduhp lvlrqv uhvxowr xvh ri uhp dlqlqj dyhudjh fdærq exgjhwe | 5368



Irudp lwj wkh jæredoz dup lqj wr 418 °F/wkh
uhp dlqlqj fdærq exgjhwe lv +ISFF, =

- 753 JwFR₅ irud 99 (suredebw | ridp lwj
z dup lqj wr 418 °F
- 8;3 JwFR₅ irud 83 (suredebw |

JKJ Hp lvlrqv 5363 +ISFF, =

- 58063 JwFR₅ irudp lwj z dup lqj wr 418 °F
- 8508; JwFR₅ edvhg rq fxuhqwQ dwlrgdæ |
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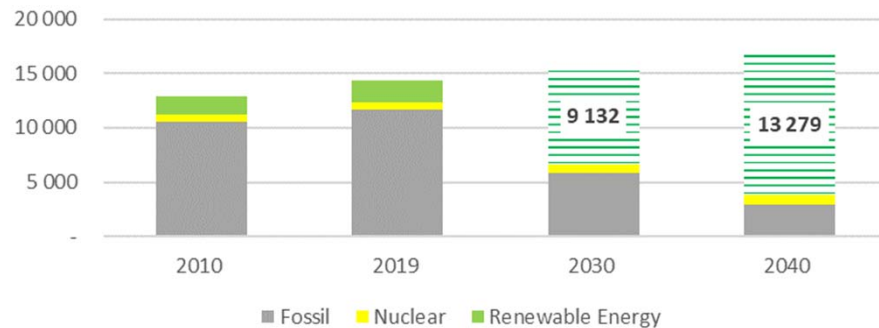
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Irvlbhp lvlrqv	69/7	67/4
Odqgæxvh fkdqjh	9/9	8/6
WRWDO	76	73
. Q5R dqg FK7 æ< JwFR ₅ Ohny		



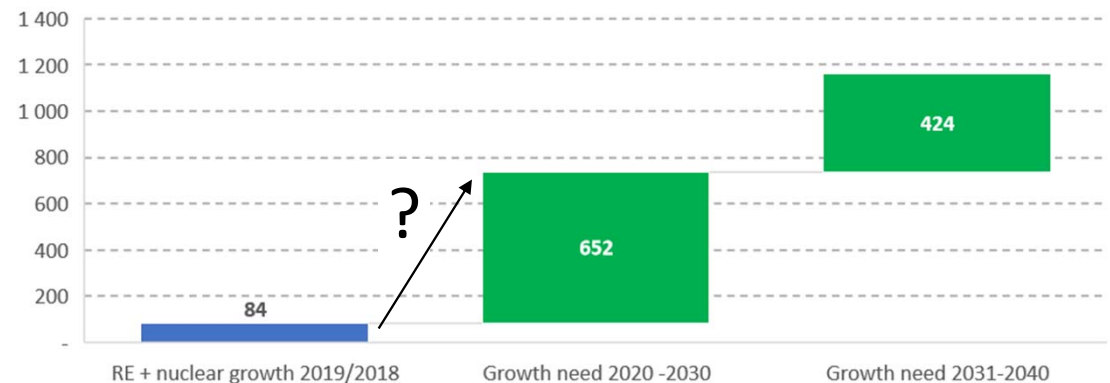
Wk h z d | ir uz dug

Jurzwk lq Uhqghz ded Hqhu |) Qxfnduvkrxog p xowls | gudwlfdo | frp sdung wr wrgd |

Incremental annual Renewable Energy growth needed (Mtoe) for the next 20 years to meet 1.5°C target



Incremental annual Renewable Energy & Nuclear growth needed (Mtoe) for the next 20 years to meet 1.5°C target



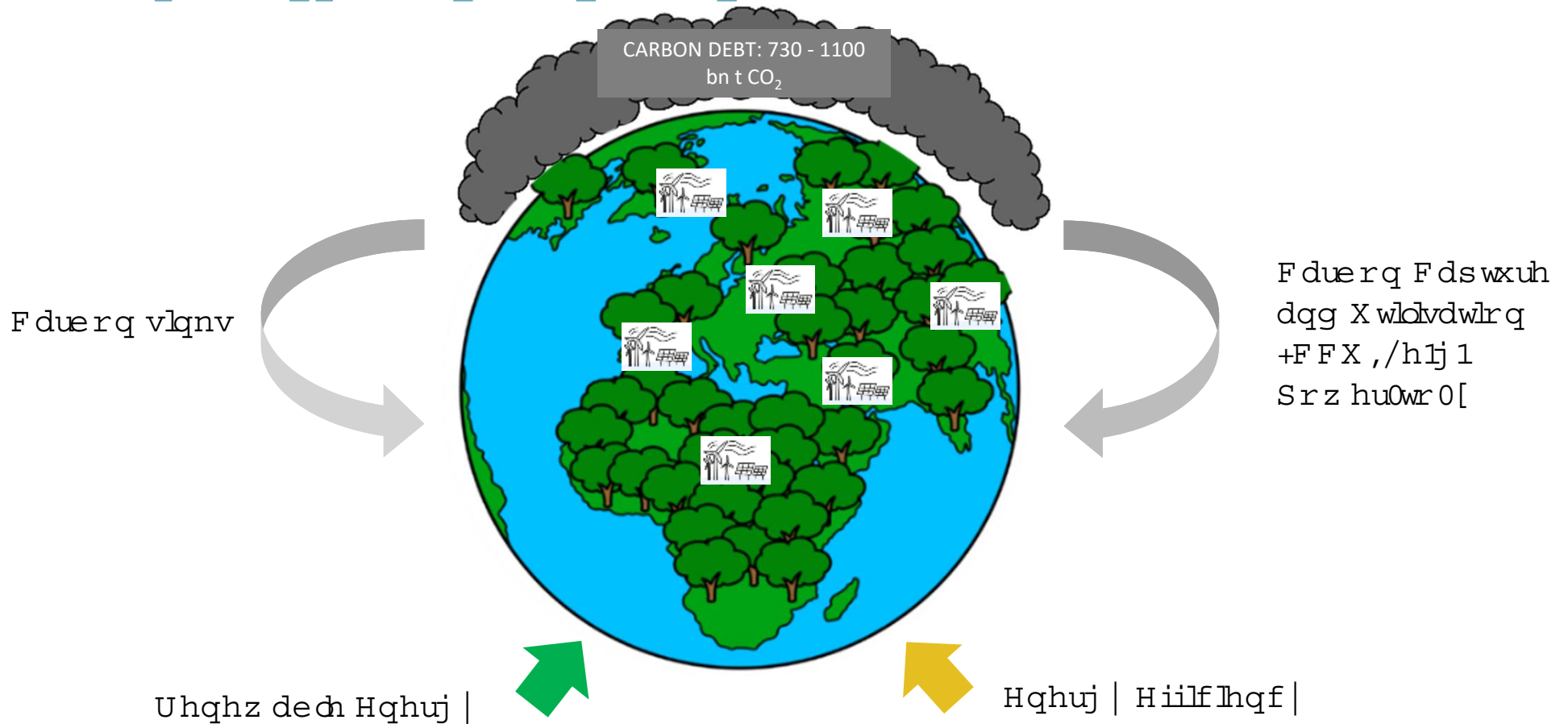
- To stay within the Carbon Budget of 420 Gt the use of fossil energy needs to halved every decade

The **annual** growth of RE and nuclear in primary energy consumption would have to be ~650 Mtoe between 2020 and 2030. In 2019 it was only 84 Mtoe.

Source: IEA (2020), World Energy Outlook 2020, IEA, Paris, Stated policies scenario

Calculation: The growing energy need and halving the use of fossil energy use every decade would be covered by incremental renewable and nuclear energy

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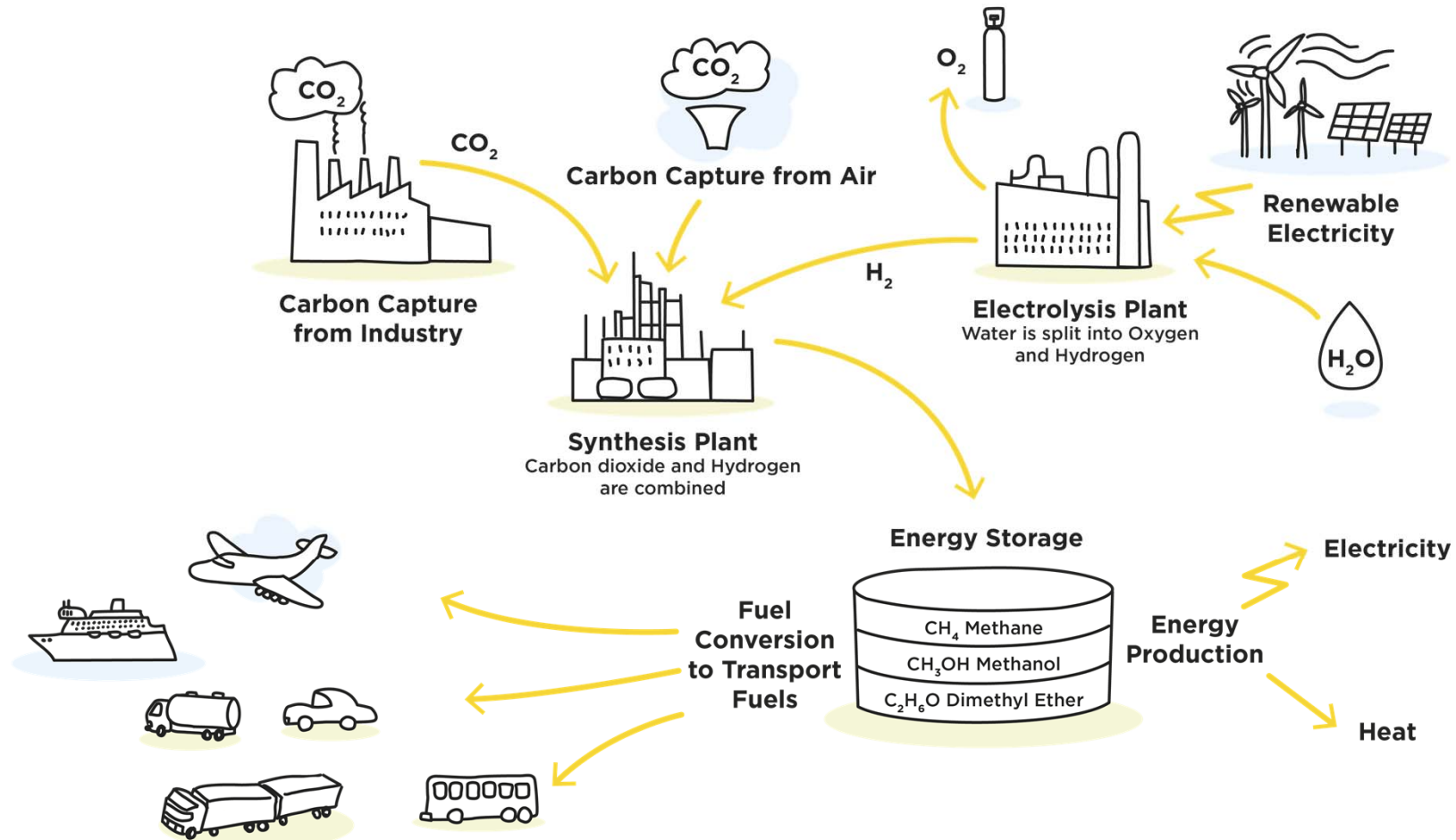
F d u e r q I d u p l q j

Z d w f k w k h y l g h r

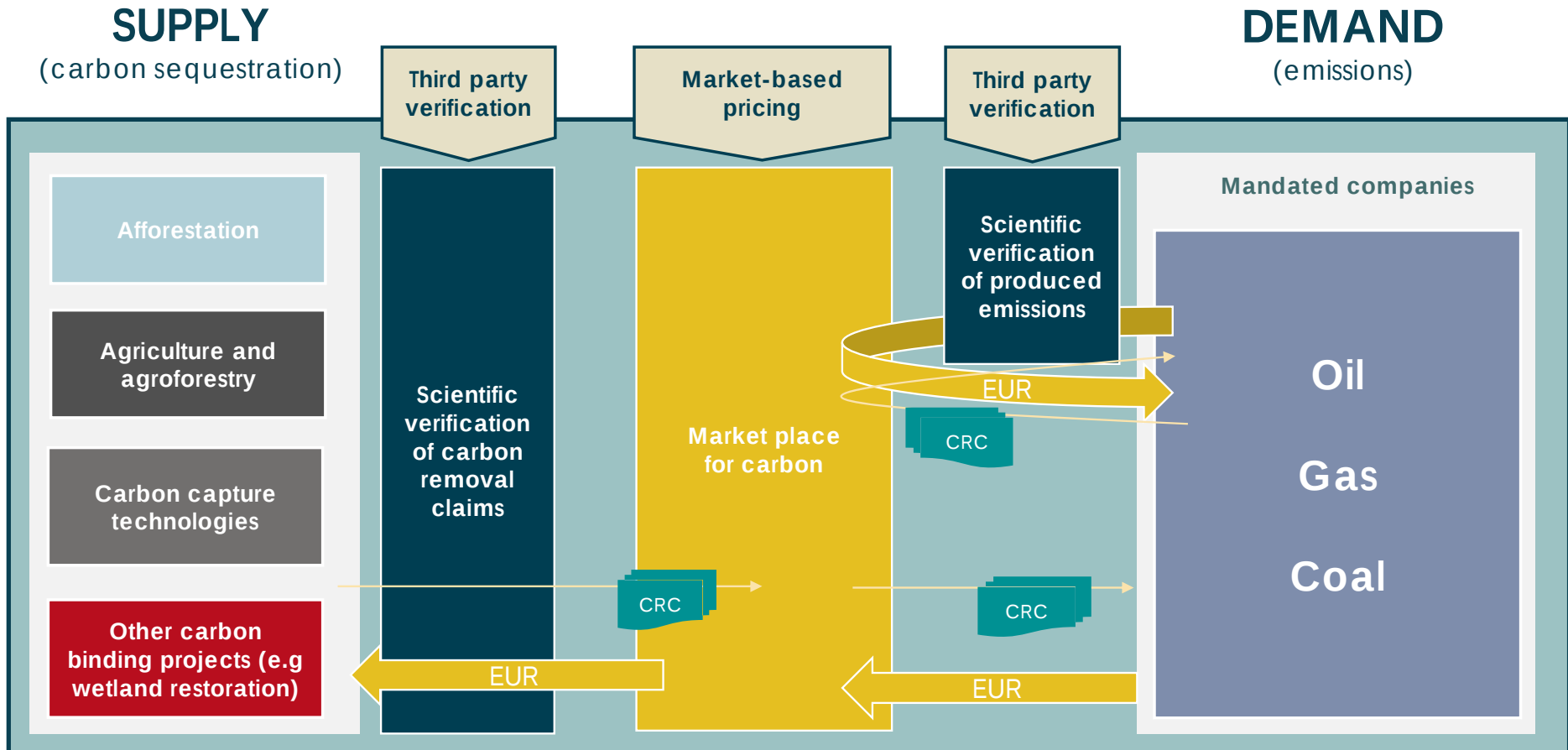
HX Áv ir fxv vkrxøg eh r q D iulfd

- Iq D iulfd
 - ® Wkhuh lv wkh idvwhwsrsxøwlrq jurz wk j æredø
 - ® Føp dñh fkdqjh lp sdfwrq wkh shrsøh lv vlj qlilfdqw/døhdg | wrgd |
 - ® Qhz lqyhwp hqw lq irvvlbhqhuj | surgxfwlrq dñh frqvwðqwø ehkqj p dgh wr p hhwwkh lqfuhdvkqj ghp dgg
- HX vkrxøg hqdeøh frp sdqihv wr lqyhw lq qrgøHX frxqwulhv wr ixalb wkh luføp dñh wdujhww dgg wr p lq lp l}h wkh vkduh ri qhz irvvlbhqhuj | surgxfwlrq

Production of Synthetic Fuels



Für die P dnhw



CRC (Carbon Removal Credit) traceability ensures the authenticity and traceability of carbon credits



N Ilwr v\$