

**SHELL** COMMERCIAL ROAD TRANSPORT

# A JELEN ÉS A JÖVŐ ÜZEMANYAGAI A FUVAROZÁSBAN



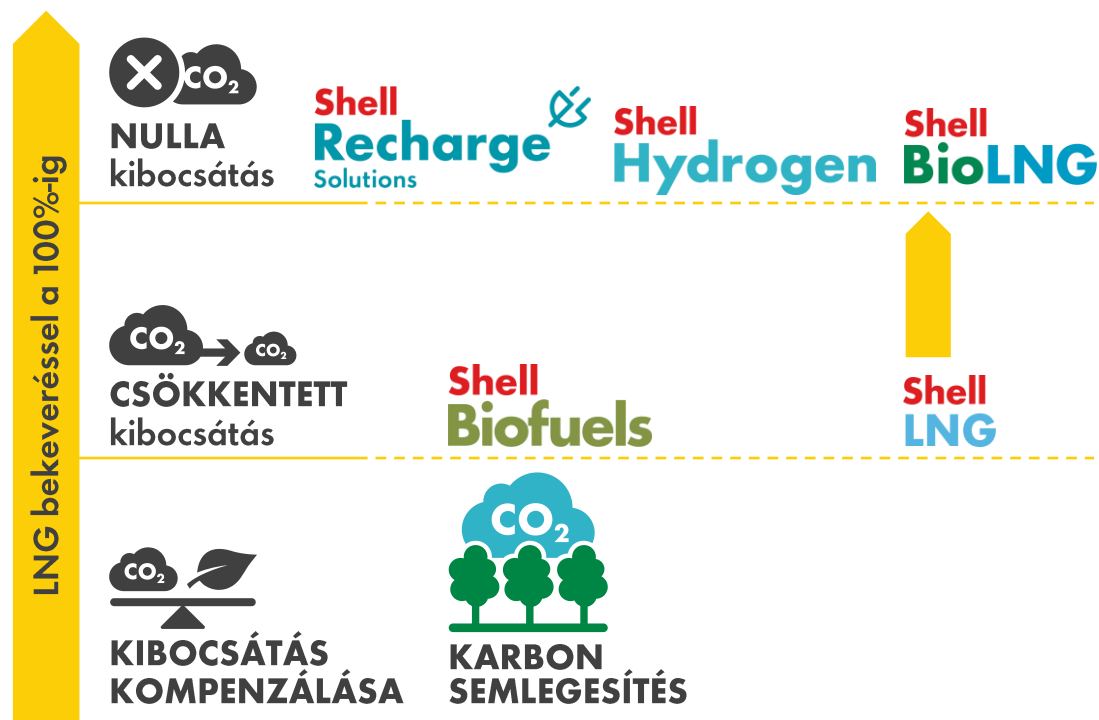
2023 .10.05.

COMMERCIAL ROAD TRANSPORT

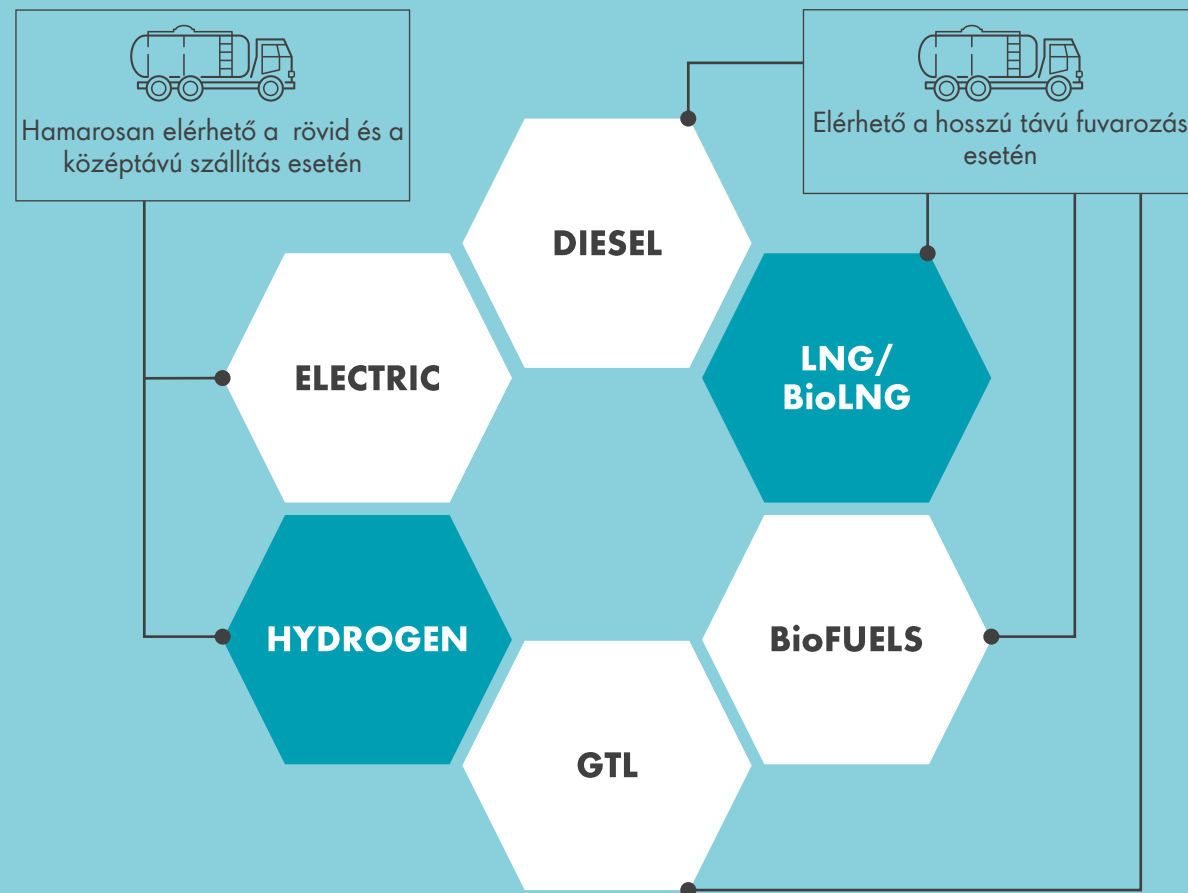
# A SHELL DEKARBONIZÁCIÓS STRATÉGIÁJA

# A SHELL ÜZEMANYAG MOZAIKJA

A CO<sub>2</sub> SEMLEGESSÉG FELÉ VEZETŐ ÚT



AZ ELŐREJELZÉSEK SZERINT 2050-BEN VILÁGSZERTÉ ELÉRJÜK A 400 MILLIÓ DB-OS GÉPJÁRMŰ DB SZÁMOT (EBBŐL 80 MILLIÓ KAMION)





Shell  
Recharge

Shell  
Renewable Diesel

Shell  
Hydrogen

Shell  
BioLNG

**A JÖVŐ TÖLTŐÁLLOMÁSA**  
**A JÖVŐ KAMIONOS ÁLLOMÁSA**

# BIO-LNG

**AZ ÜGYFELEK TÁMOGATÁSA AZ ALACSONYABB KÁROSANYAG-KIBOCSÁTÁSÚ FLOTTA FELÉ**

# LNG HÁLÓZAT

## ÚT A BIO LNG FELÉ



**90,000t\***  
GHG emissions saved in 2021 and 2022 with LNG only.  
The equivalent of:

**65** Shell LNG sites in **9** countries  
**150+** TPN accepting Shell Card

### Európai hálózat

- 701 LNG töltőállomás

Source: NGVA

- Shell LNG töltőállomások: 68 töltőállomás 9 országban  
NL 8 / BE 6 / DE 37 / FR 6 / PL 7 / TK 1 / ES 1 / HU 1 és AT 1
- Harmadikfeles elfogadás Avia, Rolande, Romac, Air Liquide, APS, PitPoint, Vulcangas, további 150+ töltőállomás.

For the latest on our network, check our [LNG site locator](#).

A kibocsátás megegyezik  **182 Millió km** dízel kamionnal megtett távolság kibocsátásával

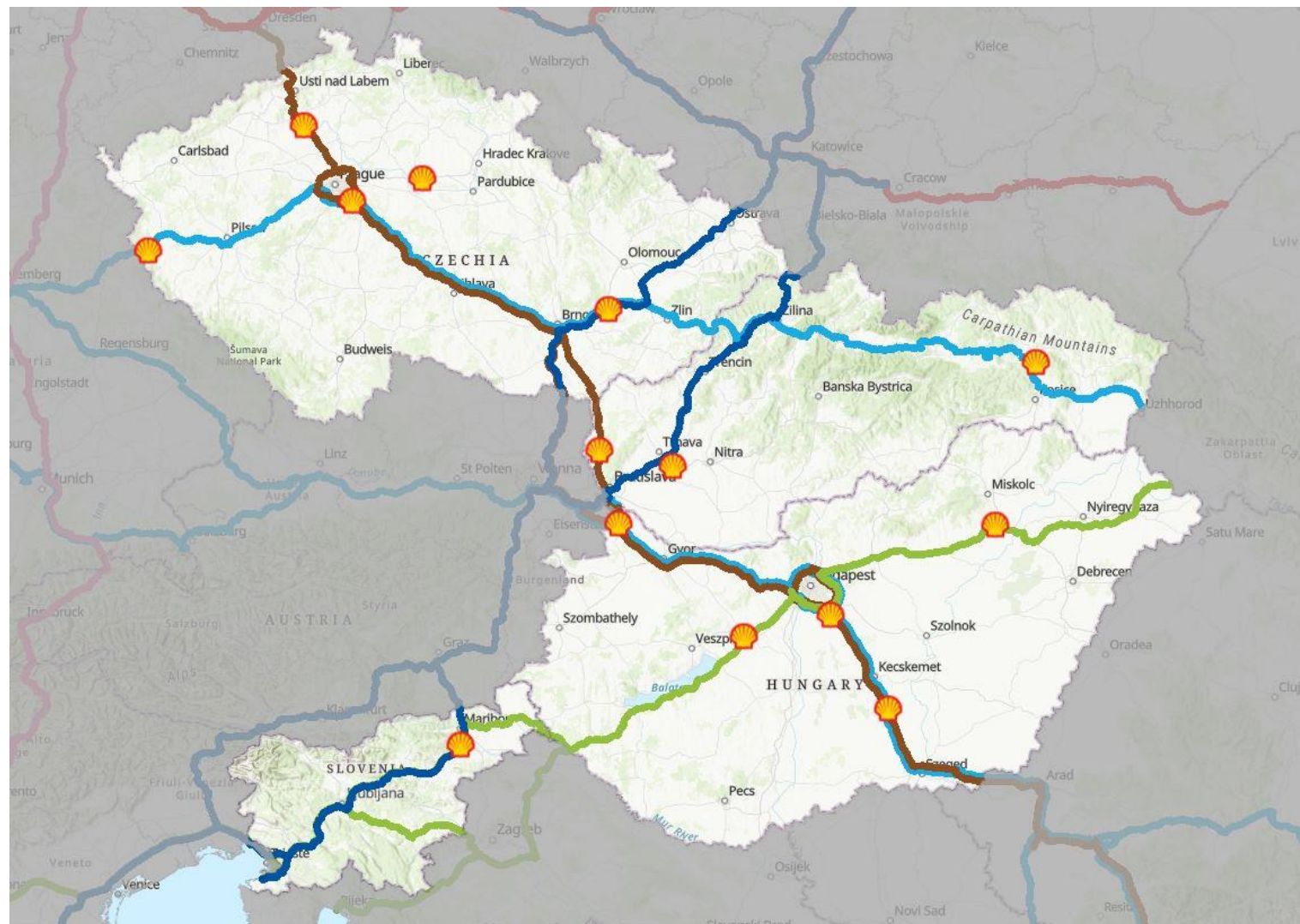
 **185,000 db** Fa szükséges ezen mennyiségű CO2 megkötésére



Shell  
BioLNG

On the road toward sustainability

# LNG térkép kis közép- kelet Európa



# SHELL LNG & BIOLNG



On the road toward sustainability

## THE BENEFITS



**OUR BIOLNG ONLY COMES FROM SUSTAINABLE BIOMASS SOURCES FOLLOWING THE EU'S GUIDELINES (REDII).**

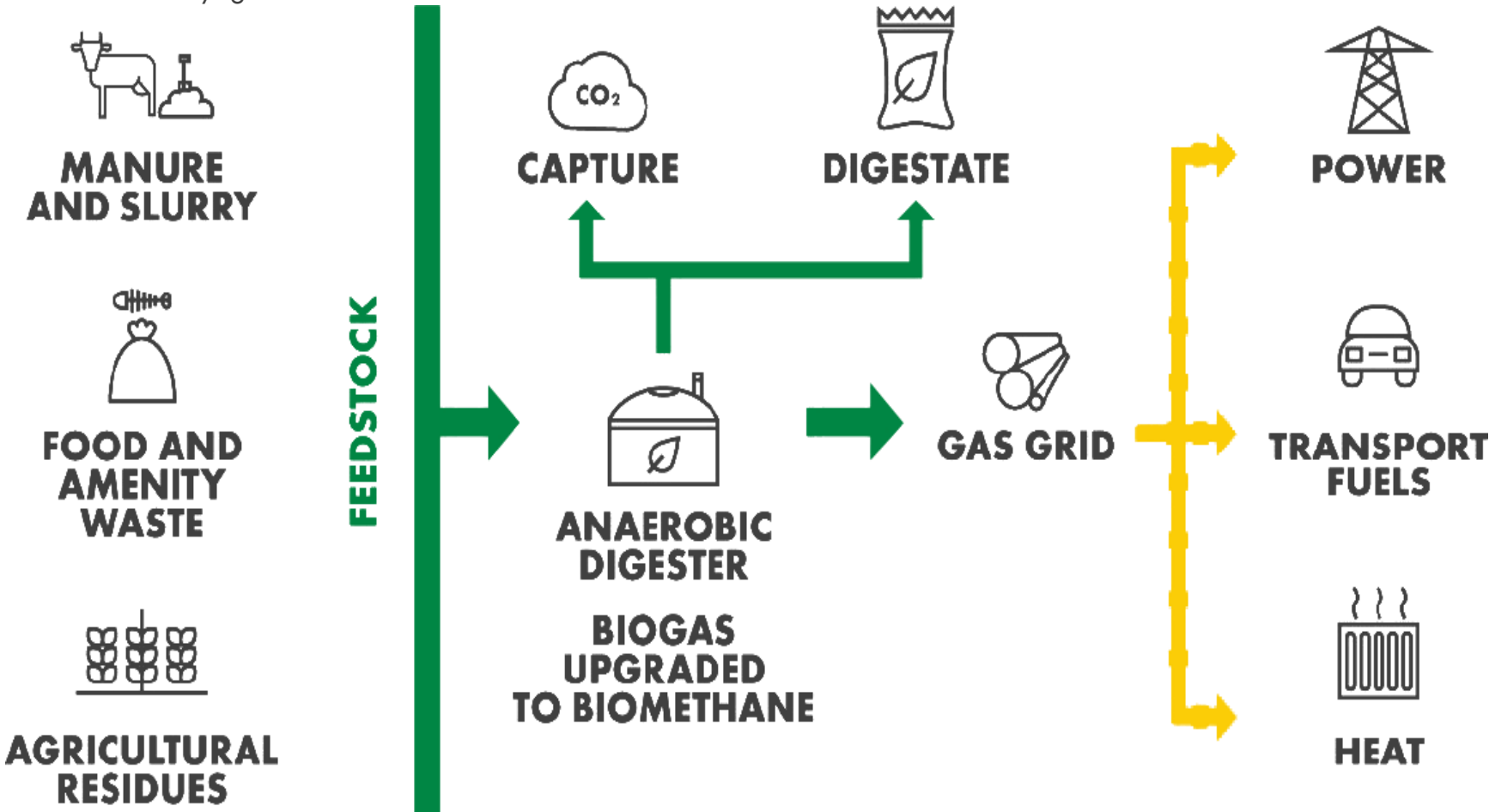


**OVER 100% GREENHOUSE GAS EMISSION SAVINGS ACHIEVABLE. BIOLNG SOURCED FROM A VARIETY OF FEEDSTOCKS CAN RESULT IN SIGNIFICANT REDUCTION (EVEN CARBON NEGATIVE) IN LIFE-CYCLE GREENHOUSE GAS EMISSIONS.1**



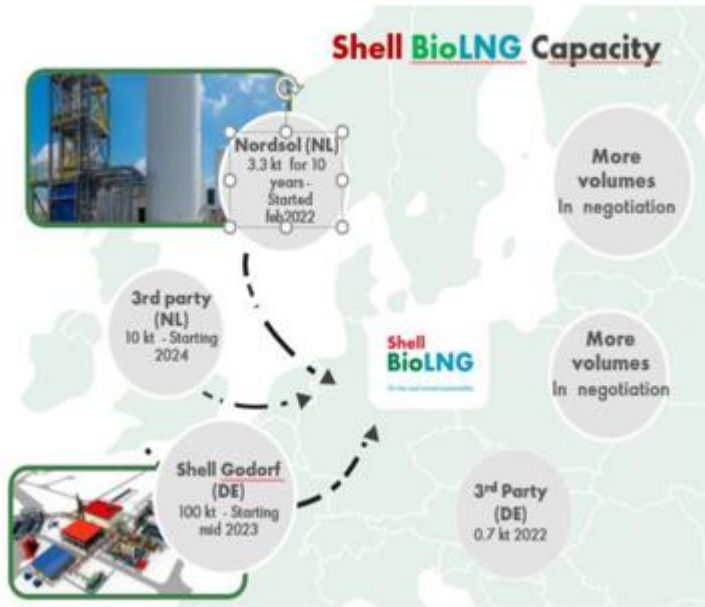
**ALL MAJOR VEHICLE MANUFACTURERS ARE READY FOR THEIR LNG TRUCKS TO RECEIVE BIOLNG WITHOUT THE NEED FOR MODIFICATION.**

- LNG-vel már csökkentettük a károsanyag-kibocsátást: 2017-től 2021 Decemberig, az LNG-vel történt tankolásokkal már 81,800 tonna CO<sub>2</sub>-vel egyenértékű károsanyagkibocsátást értünk el, ami megegyezik kb 76 millió km diesel kamionnal megtett úton történt károsanyag-kibocsátással
- Több károsanyag-kibocsátás csökkentés érhető el BioLNG-vel.

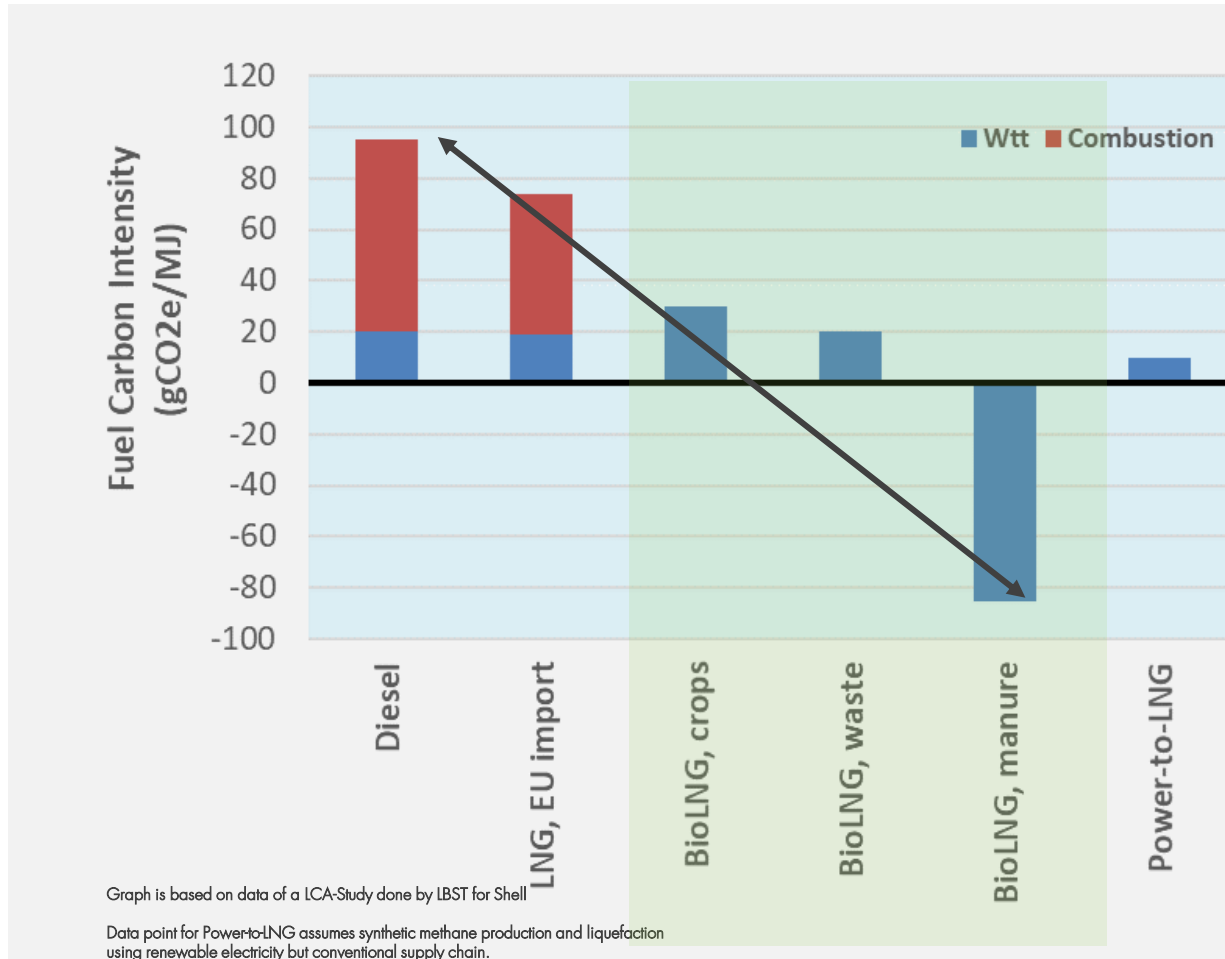




# ELKÖTELEZETTSÉGÜNK A BIO-LNG FELÉ



# CO2e érték: hogy számoljuk a karbonintenzitást(CI): "g CO2e/MJ"



Graph is based on data of a LCA-Study done by LBST for Shell

Data point for Power-to-LNG assumes synthetic methane production and liquefaction using renewable electricity but conventional supply chain.

g CO2e / MJ

gramm

széndioxid

megajoule

„e” jelentése:

Az összes

üvegházhatású gáz

átkovertálva CO2-re

Greenhouse Gas	Global Warming Potential (GWP)
Carbon dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	25
Nitrous oxide (N <sub>2</sub> O)	298
Hydrofluorocarbons (HFCs)	124 - 14,800
Perfluorocarbons (PFCs)	7,390 - 12,200
Sulfur hexafluoride (SF <sub>6</sub> )	22,800
Nitrogen trifluoride (NF <sub>3</sub> )	17,200

CI Diesel

94,1gCO2e/MJ

CI B7 Diesel

90,2gCO2e/MJ

CI Shell Fossil LNG

77,6gCO2e/MJ

CI BioLNG 50% CO2e reduction

45,1gCO2e/MJ

CI BioLNG 100% CO2e reduction

0gCO2e/MJ

# SZEMÉLYRE SZABOTT MEGOLDÁS AMELYET MEGOSZTHAT ÜGYFELEIVEL ÉS MEGBÍZÓIVAL

A BioLNG tanusítvány segítségével igazolhatja a széndioxid kibocsátás csökkentését amelyet felhasználhat a fenntarthatósági jelentéseiben.



Együttműködés az  
OEM-ek, fuvarozók &  
szállítványozók közt:  
kb. 85% CO<sub>2</sub>e  
csökkentés érdekében



IVECO



SEPURAN® Green  
An Evonik product.



Shell  
BioLNG  
Blend

Attn: *Company*  
YOUR REFUELLING WITH SHELL BIOLNG

Dear Sir, Madam,

Thank you for choosing Shell and for enabling your fleet to reduce carbon emissions by refuelling with Shell BioLNG.

We are pleased to offer you the Quarterly Volume Statement of your fuelled BioLNG blend in the Shell LNG network in The Netherlands which is from renewable feedstock† and has a carbon intensity of ( ) gr CO<sub>2</sub>e/MJ for quarter 2, 2022, which is the equivalent of ( ) kgCO<sub>2</sub>e/kg\*\*\*\*.

XX.00 TONS

less CO<sub>2</sub>e emissions compared to market representative diesel

YY%

CO<sub>2</sub>e emissions reduction

This volume of ( ) kg of BioLNG has emitted ( ) tons of CO<sub>2</sub>e\* emissions and with that ( ) less tons of CO<sub>2</sub>e\*emissions, which equals to ( ) gCO<sub>2</sub>e/MJ less compared to market representative diesel over the period 2, 2022. This equals to YY% less CO<sub>2</sub>e emissions when compared to market representative diesel, calculated on a well-to-wheel basis.\*\*



# BIO-ÜZEMANYAGOK

AZ ÜGYFELEK TÁMOGATÁSA AZ ALACSONYABB KÁROSANYAG-KIBOCSÁTÁSÚ FLOTTA FELÉ

# MAĞASABB BIOÜZEMANYAG FELHASZNÁLÁSSAL, MÁR MA CSÖKKENTHETI A KARBONKIBOCSÁTÁSÁT



**Shell**  
**HVO**  
Renewable Diesel

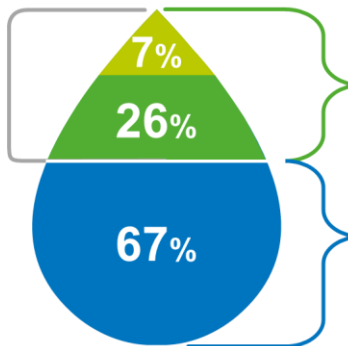
100%



- 100% Paraffinic fuels (EN 15940) e.g. from used cooking oil
- 100% waste & residue\* derived bio components
- Up to 90% CO<sub>2</sub> emission reduction\*\*

**R33Blue**  
Diesel

33%



33 % waste & residue\* derived bio components

- 7 % Biodiesel (EN14214) e.g. from used cooking oil
  - 26 % Paraffinic fuels (EN 15940) e.g. from used cooking oil
  - 67 % high quality diesel fuel with excellent cold flow properties
- At least 22% CO<sub>2</sub>\*\* reduction via biofuels and ~80% CO<sub>2</sub> compensation via NBS\*\*\*

**Shell**  
**Diesel B20**

**Diesel B30**

**Diesel B100**

**HVO-GTL (Gd<sup>45</sup>)**

\*Depends on feedstocks & is proved according by massbalanced PoS/certified feedstock  
\*\*Well to Wheel CO<sub>2</sub> reduction based on GHG value of PoS of used components with 95.1g CO<sub>2</sub>/MJ as reference for fossil diesel

\*According to massbalanced PoS/certified feedstock  
\*\*Well to Wheel CO<sub>2</sub> reduction based on GHG value of PoS of used components with 95.1g CO<sub>2</sub>/MJ as reference for fossil diesel  
\*\*\*Compensation via nature based solutions: [Nature-based solutions](#) | Shell Global

Hollandiában már elérhető a Shell töltőállomásokon, hamarosan további országokban is elérhető.

Németországban elérhető egyes töltőállomásokon





**Drop in fuel**

Easy to utilize with new and older on-road diesel engines. No infrastructure investment required



A Shell 2024-ig egy 820,000 tonna gyártási kapacitású bioüzemanyag gyárat épít Rotterdamban a Shell Energy & Chemicals Parkban

# CO2 TANUSÍTVÁNY



**Shell**  
Renewable Diesel

ON THE ROAD  
TOWARDS SUSTAINABILITY

**Attn: Sovereign Speed Netherlands BV**  
YOUR REFUELLING WITH SHELL RENEWABLE DIESEL

**Dear Sir, Madam,**

Thank you for choosing Shell Renewable Diesel.

We are pleased to offer you the Quarterly Volume Statement of your Shell Renewable Diesel fuelled in the Netherlands, which is produced from renewable feedstock and has a carbon intensity of 16,9 gr CO<sub>2</sub>e/MJ for quarter 3, 2022<sup>1</sup>.

The volume of 113 liters of Shell Renewable Diesel that Sovereign Speed Netherlands BV has purchased hereafter refer to as the "Shell Renewable Diesel" has emitted 0,1 tons of a CO<sub>2</sub>e\* emissions, which equals to 16,9 gr CO<sub>2</sub>e/MJ over the period 3, 2022. This equals to 81% less CO<sub>2</sub>e emissions when compared to market representative diesel\*\*, calculated on a well-to-wheel basis.\*\*\*

**0,3 TONS**  
less CO<sub>2</sub>e emissions compared to market representative diesel

**81% CO<sub>2</sub>e**  
CO<sub>2</sub>e emissions reduction



**EV**

**AZ ÜGYFELEK TÁMOGATÁSA AZ ALACSONYABB KÁROSANYAG-KIBOCSÁTÁSÚ FLOTTA FELÉ**

# Shell's eMobility ecosystem

## Onsite Energy Solutions

Providing innovative, reliable and cleaner energy solutions for businesses including 100% certified renewable electricity.



## On-Street & On-The-Go Charging

Providing drivers access to ~400.000 roaming charge points including rapid charging on Shell forecourts, and via convenient on-street charging through ubitricity.



## Employee & Guest Charging

Providing easy-to-use, flexible AC smart charging solutions at business locations



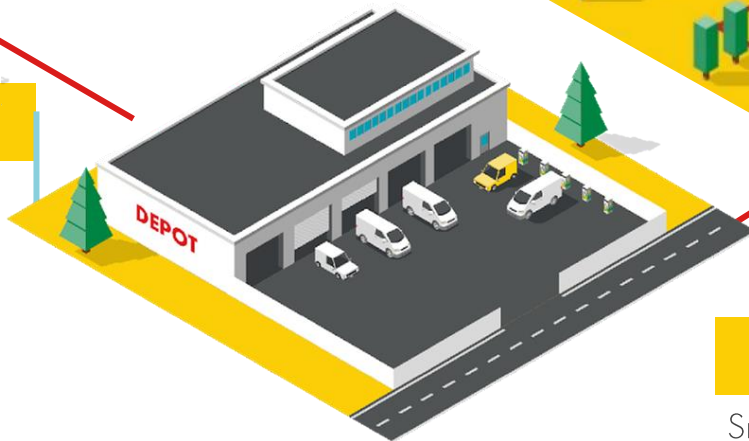
## Energy for Homes & Businesses

Providing innovative, reliable and cleaner energy solutions for homes and businesses including 100% certified renewable electricity.



## eDepot charging

Providing commercial fleets of eVans and eTrucks with AC & DC charging solutions

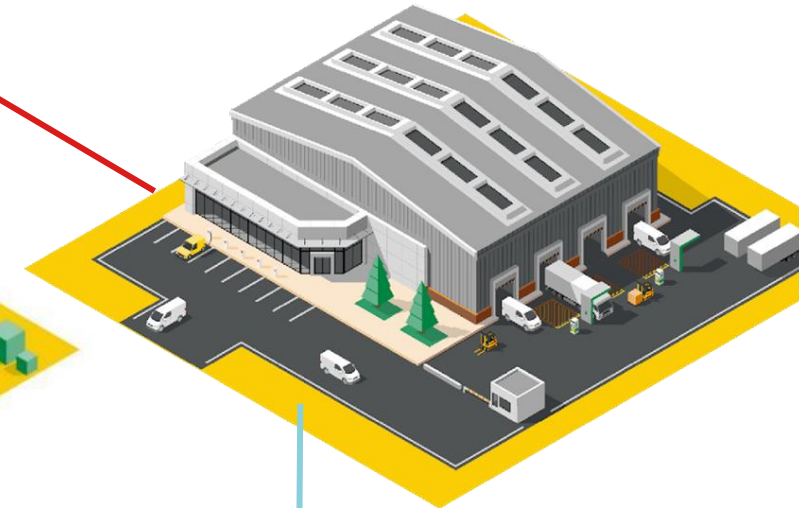


## Home Charging

Smart AC home charger, with automatic reimbursement



## Mobility hubs

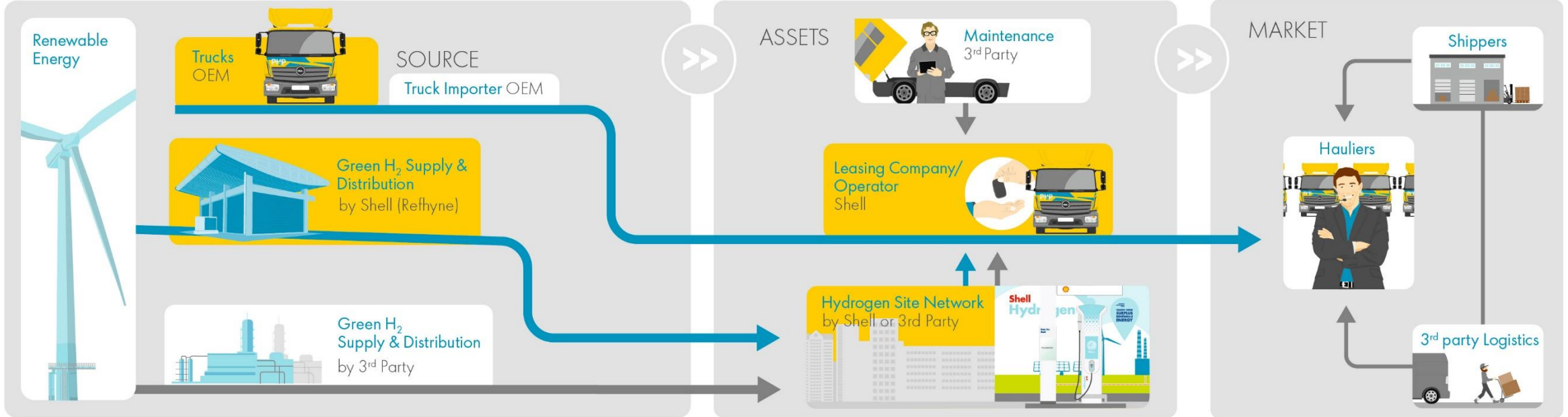




# HIDROGÉN

**AZ ÜGYFELEK TÁMOGATÁSA AZ ALACSONYABB KÁROSANYAG-KIBOCSÁTÁSÚ FLOTTA FELÉ**

# A fuvarozás jövője a hidrogénnel



**SHELL IS GOING AHEAD AND STIMULATING THE DEMAND NOW**

**A PAY-PER-MILE CUSTOMER OFFER**

- Trucks are sourced and leased by Shell
- Hydrogen supply and infrastructure by Shell
- Insurance and maintenance are included
- Residual risk is covered as in any lease

**SELECTED CUSTOMER DISCUSSIONS**

**A EUROPEAN HYDROGEN CORRIDOR**  
 Shell is kick-starting infrastructure with Hydrogen Production in Rotterdam, Hamburg and Cologne

- Ca. 1200 km freight corridor by 2025
- Shell to build H<sub>2</sub> stations along corridor
- Daimler Truck to supply H<sub>2</sub> trucks



# Shell fog nyitni H<sub>2</sub> üzemanyag-töltő állomásokat kamionok számára Európában

## Várható állomásnyitások 2023-24-ben

### Netherlands

Emmen (H35)

### Germany

Passau (H35) and Hannover (H35/H70)

 Electrolyser

 In operation

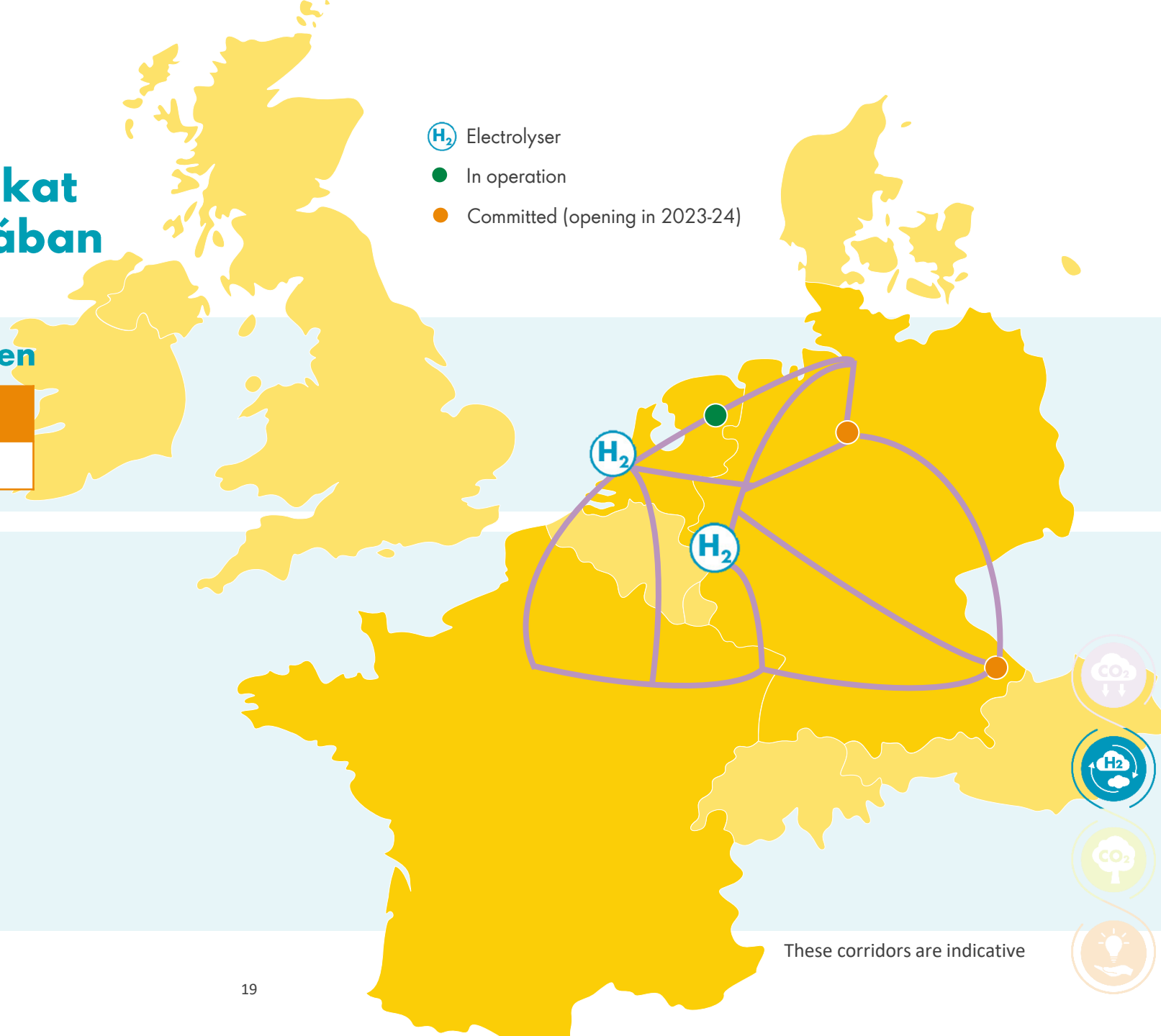
 Committed (opening in 2023-24)



Initial network of HD HRS in North-West Europe  
(3 t/d capacity, dual pressure 350/700 bar)



Electrolysers in hub location to serve initial H<sub>2</sub> Mobility demand



These corridors are indicative

# A MAI NAP ÜZENETE



**NINCS EGY BIZONYOS MEGOLDÁS A KÖZÚTI ÁRUFUVAROZÁS DEKARBONIZÁCIÓJÁRA**

**A DEKARBONIZÁCIÓ ELKEZDÖDÖTT**

**BIOLNG LEHET AZ EGYIK JÓ MEGOLDÁS RÖVID ÉS KÖZÉPTÁVON**

