



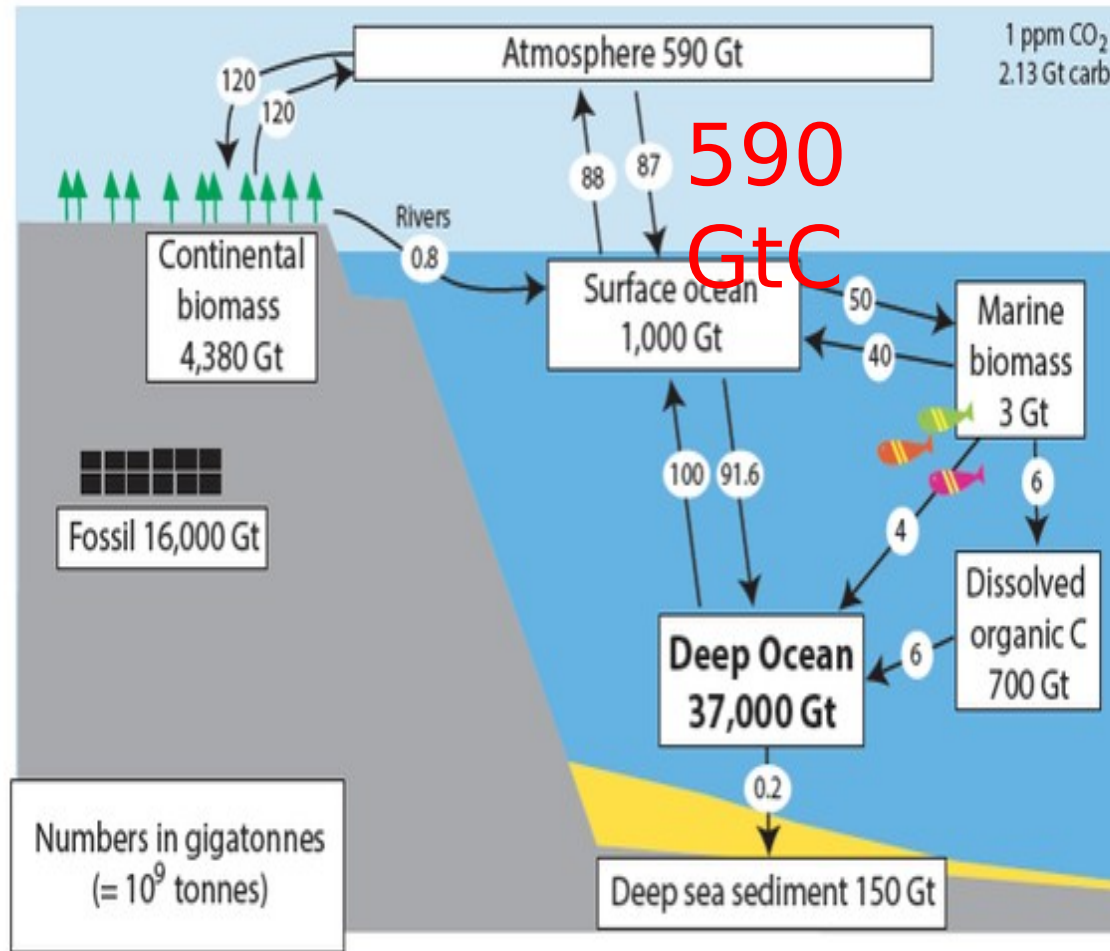
AINS 16.09.2026.

NE u SRBIJI - **DA** ili **NE**

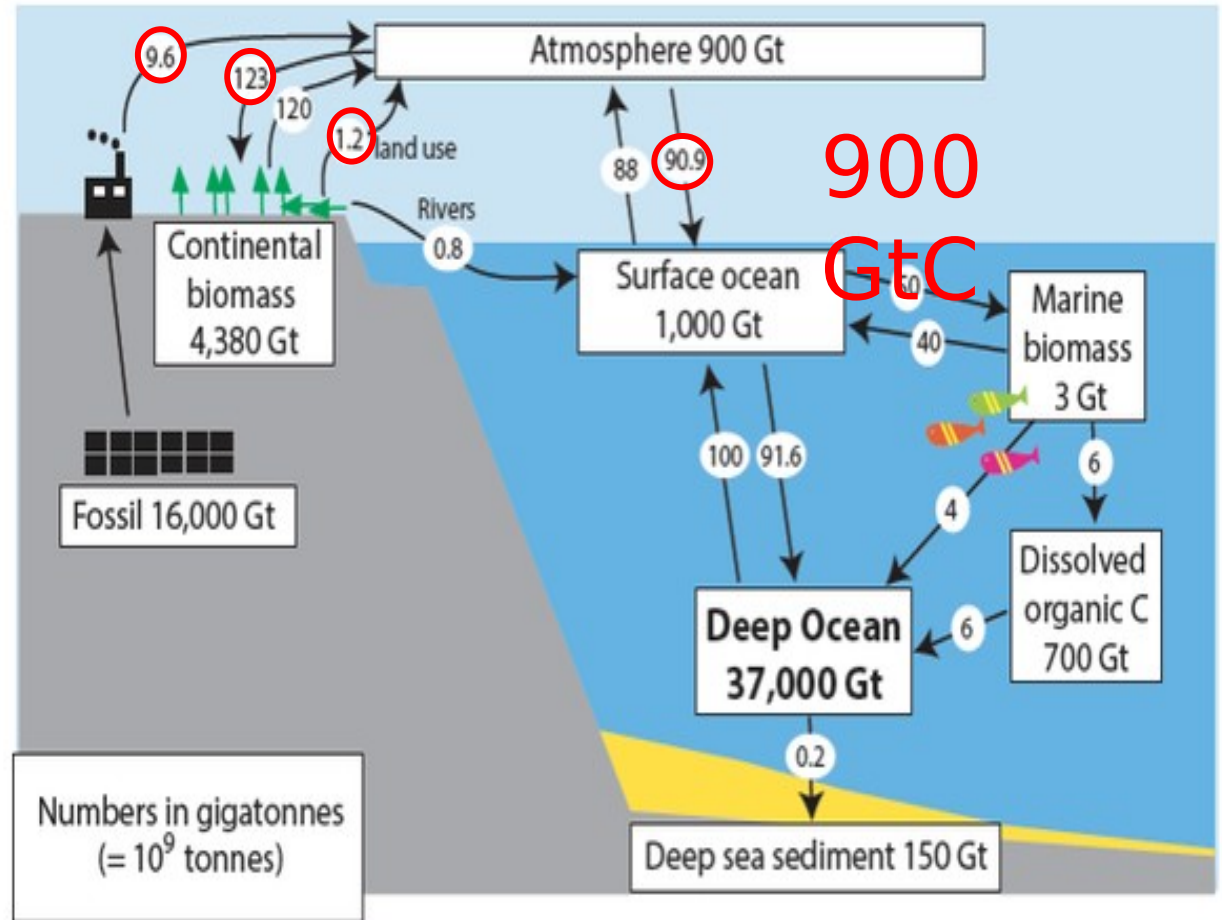
M. Mesarović

НАРУШЕНА РАВНОТЕЖА МАСЕНОГ БИЛАНСА УГЉЕНИКА

Global Carbon Reservoirs - pre Industrialisation



Global Carbon Reservoirs - present day



Data from:

Friedlingstein, P., and others (2022). "Global Carbon Budget 2022." *Earth Syst. Sci. Data* 14(11): 4811-4900
 Valero, A., A. Agudelo and A. Valero (2011). "The crepuscular planet. A model for the exhausted atmosphere and hydrosphere." *Energy* 36(6): 3745-3753.

НЕРАВНОТЕЖА ИЗАЗИВА ГЛОБАЛНО

ЗАГРЕВАЊЕ



ПОЖАРИ

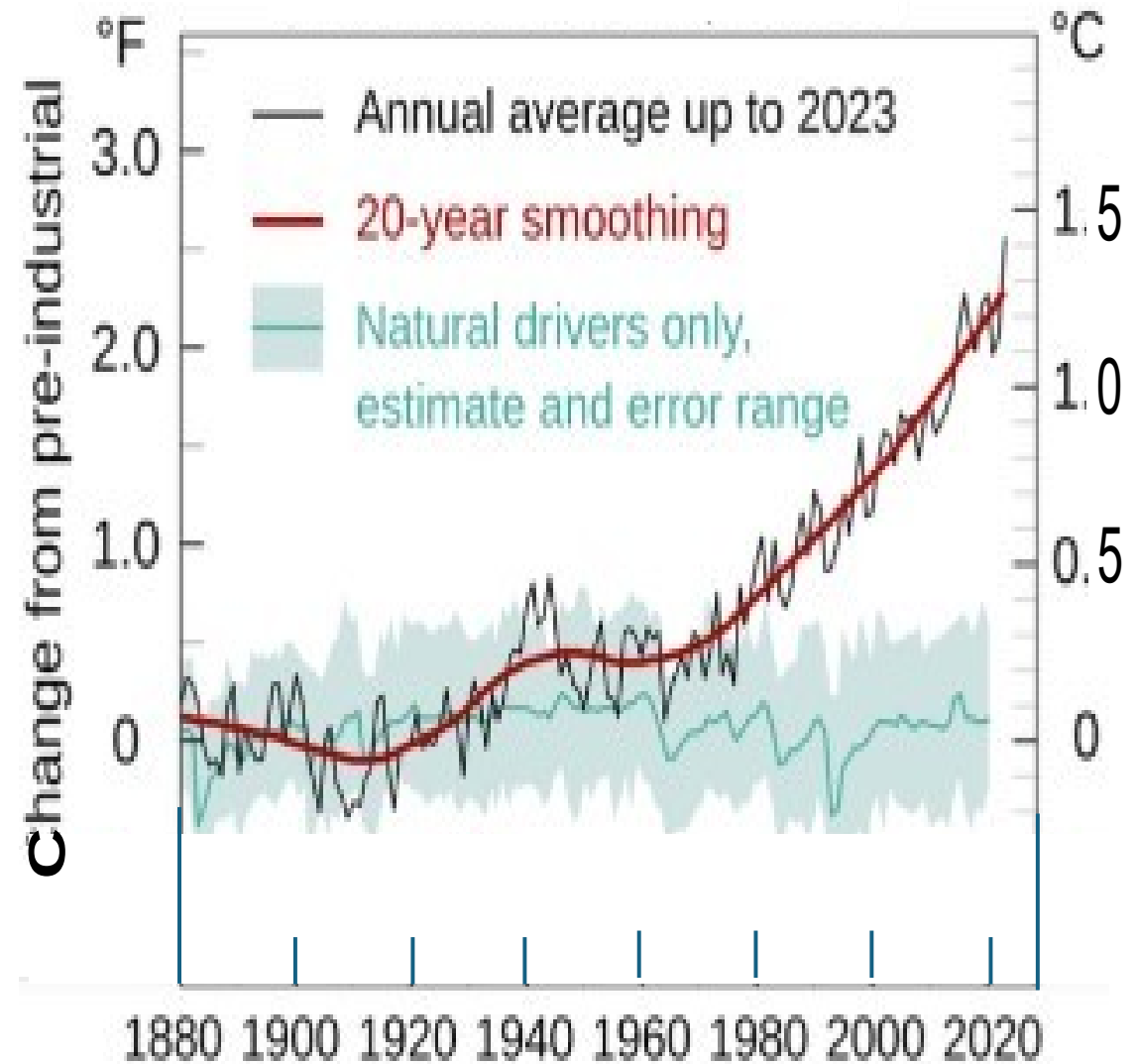
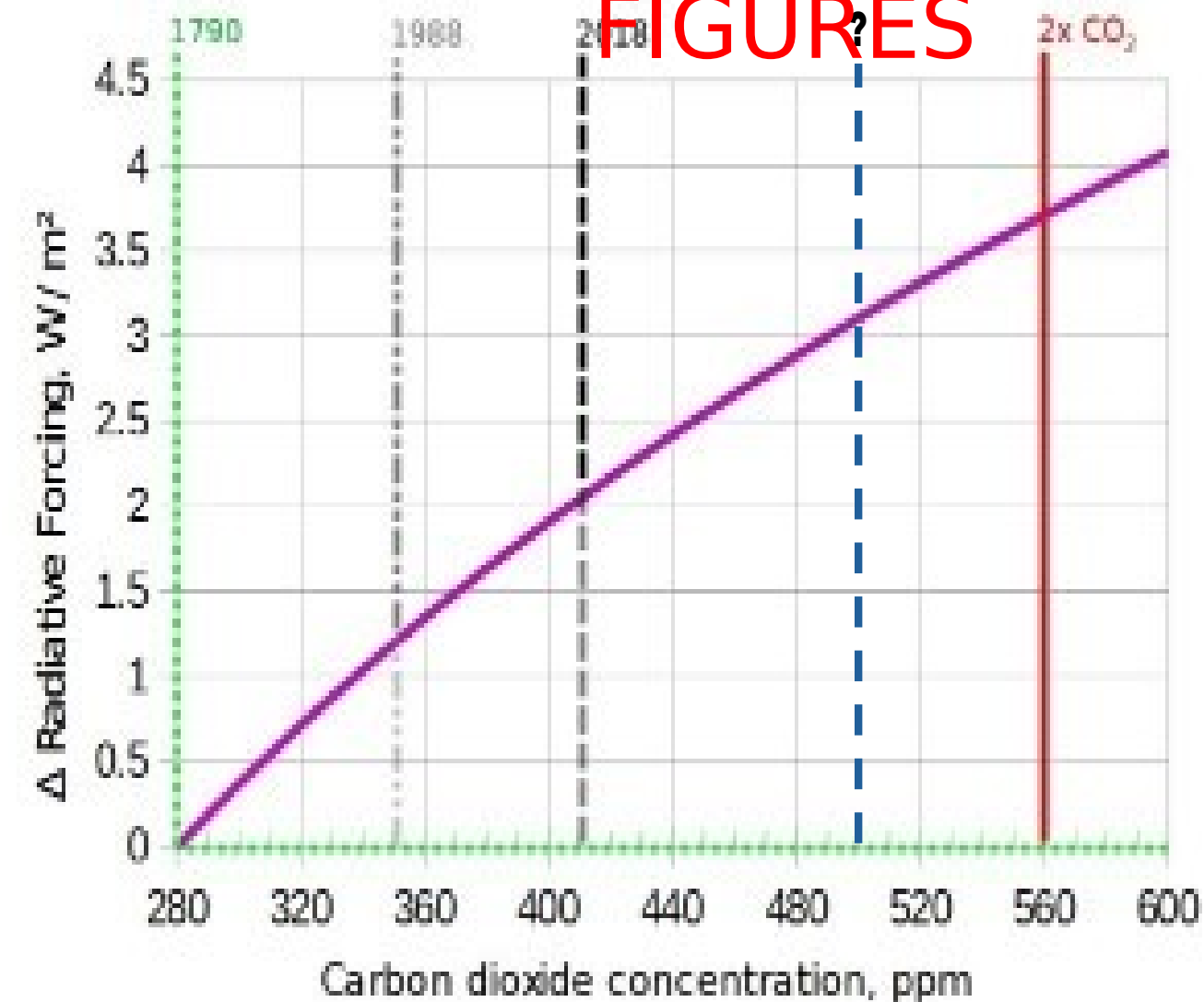


СУШЕ



УРАГАНИ

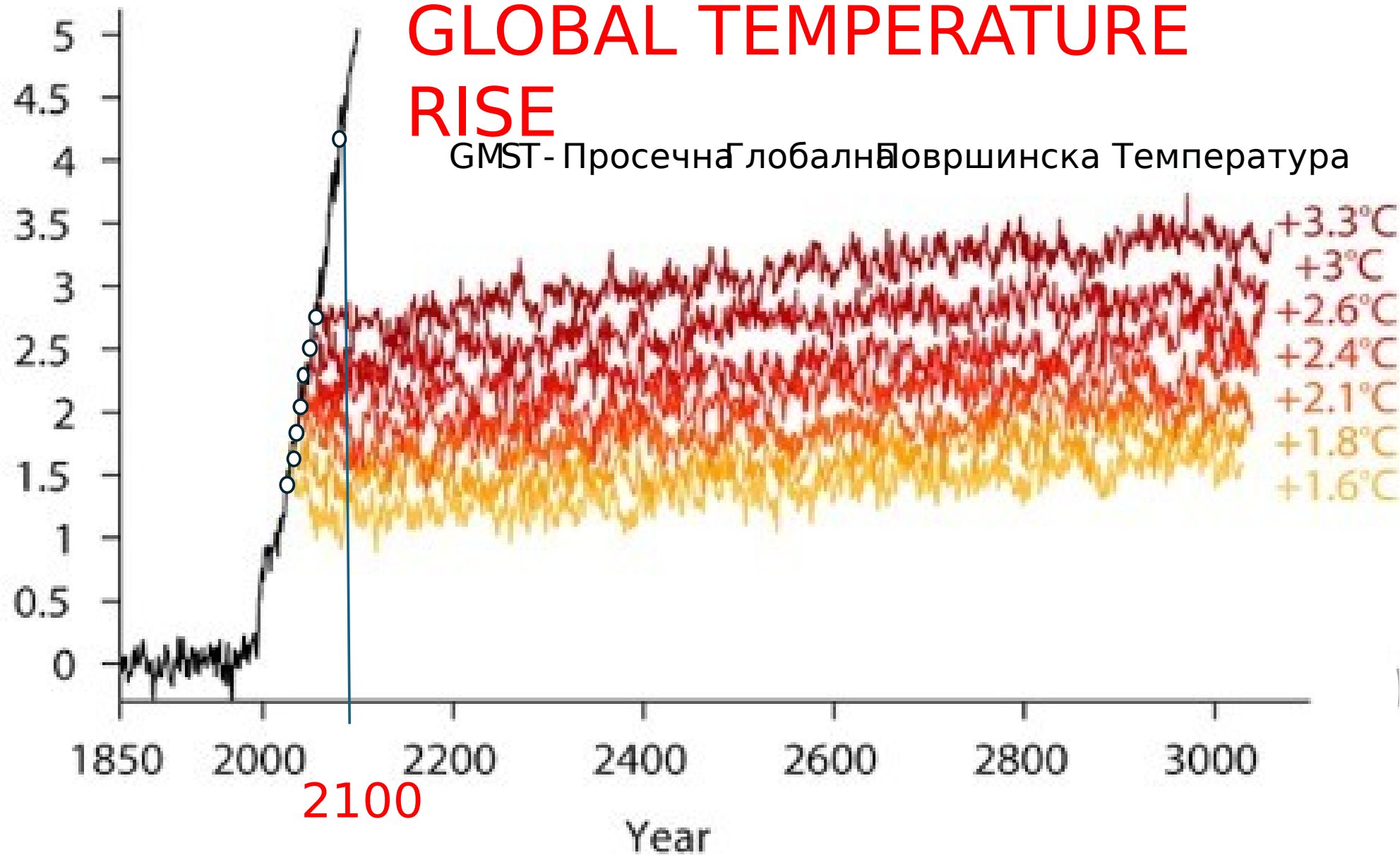
GLOBAL WARMING IN FIGURES



GLOBAL TEMPERATURE RISE

GMST - Просечна Глобална Површинска Температура

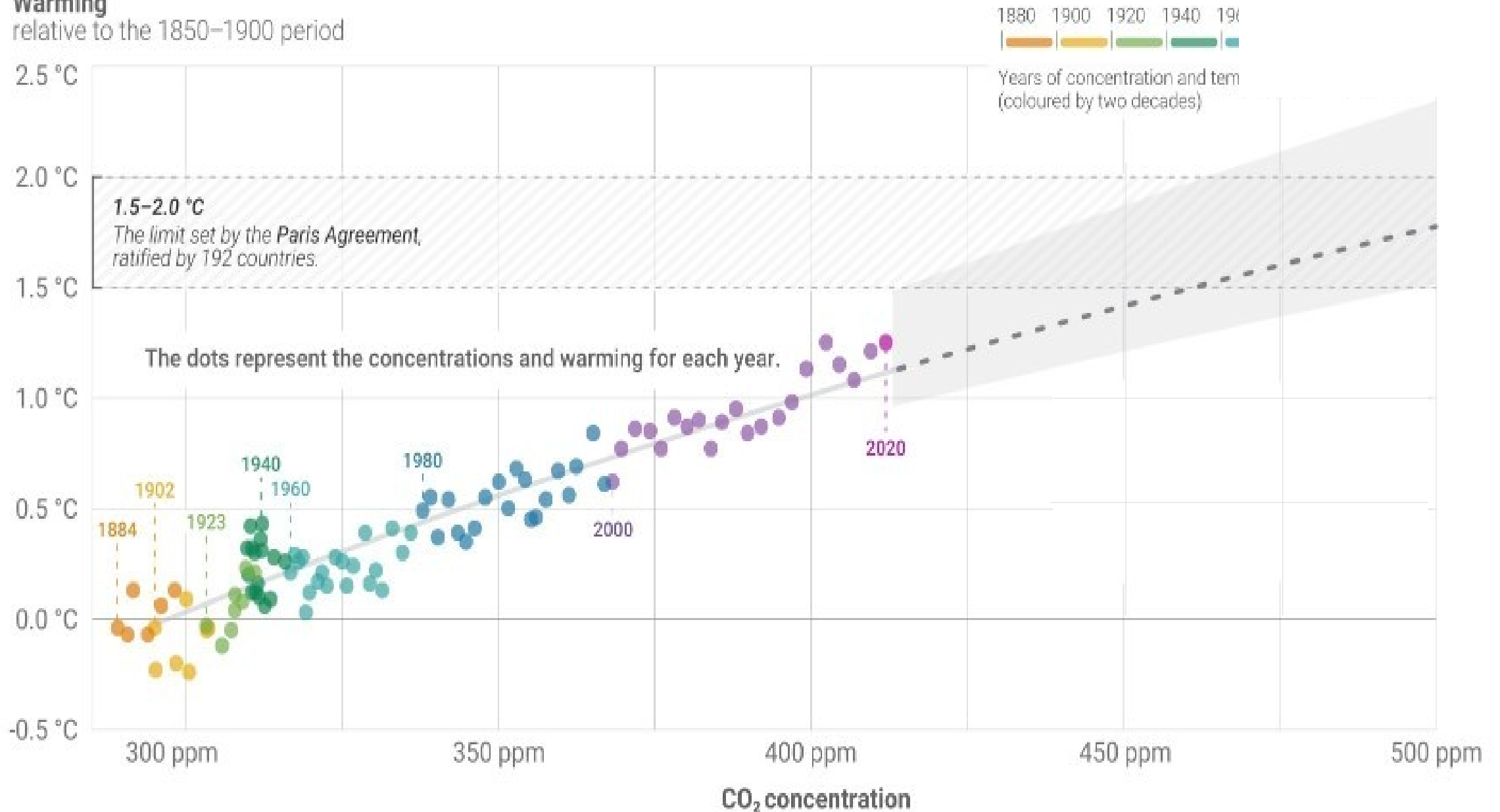
GMST anomaly (°C)



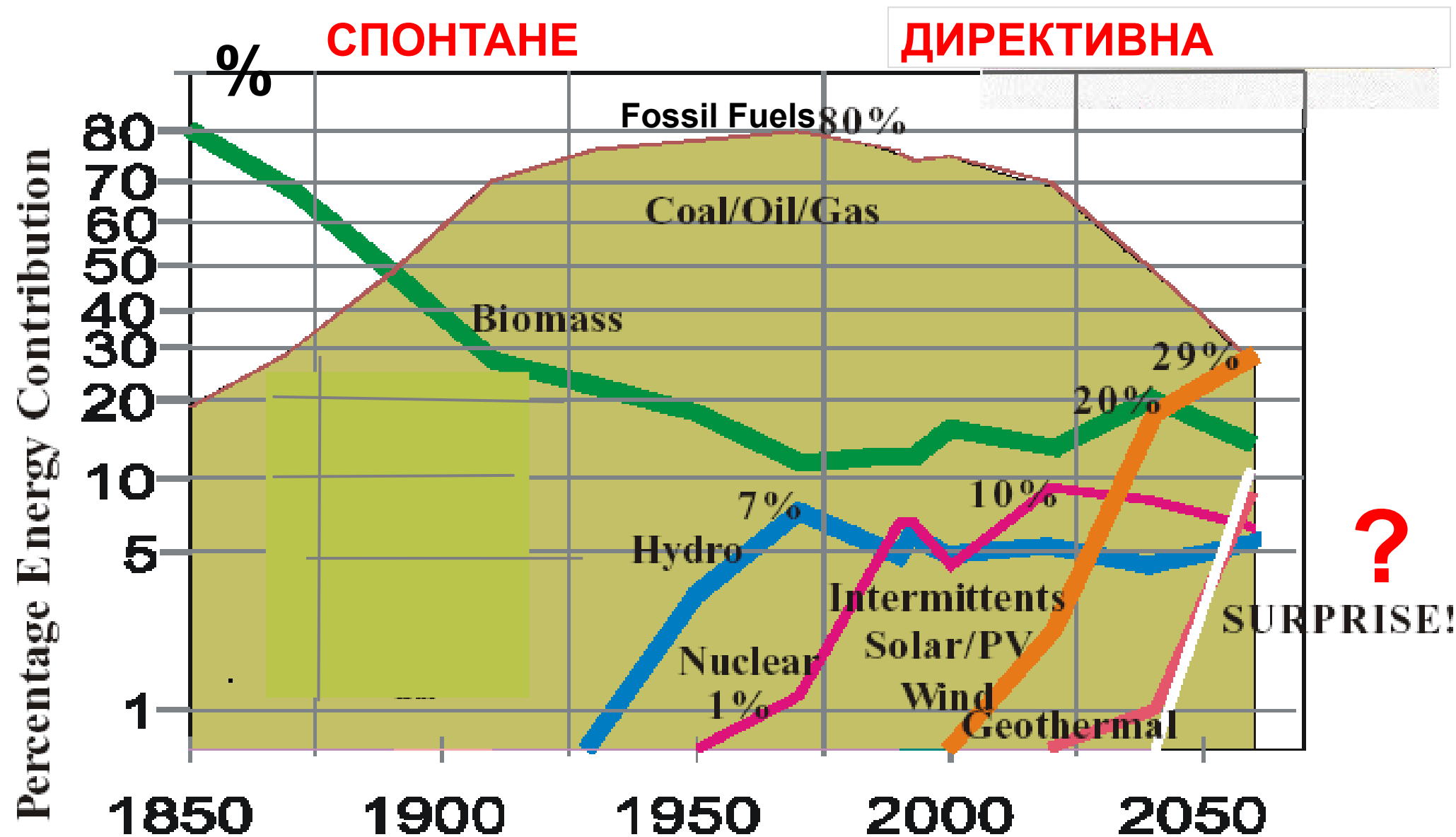
PARIS GOALS

Warming

relative to the 1850–1900 period



ЕНЕРГЕТСКЕ ТРАНЗИЦИЈЕ



ОСОБЕНОСТИ ОВЕ ЕНЕРГЕТСКЕ ТРАНЗИЦИЈЕ

Прва је у људској историји која није спроводила се врло брзо под притиском више фактора. Криза земље су дужне да спроведу декарбонизацију обухвата цео привредни систем промене у производњи и потрошњи енергије обухвата децентрализацију енергетског сектора диверсификацију чистих енергетских извора дигитализацију електроенергетске мреже је праведност у спровођењу (just) транзиције

ПРОМЕНА ПАРАДИГМЕ

ЧЕТИРИ (4)

A

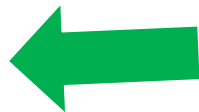
- **A**vailability
- **A**ccessibility
- **A**cceptability
- **A**ffordability



ЧЕТИРИ (4)

D

- **D**ecarbonization
- **D**ecentralization
- **D**iversification
- **D**igitalization



КОНТРОВЕРЗЕ КОЈЕ УСПОРАВАЈУ

ТРАНЗИЦИЈА

GLOBAL WARMING FALSE ALARM

THE BAD SCIENCE BEHIND THE UNITED NATIONS' ASSERTION THAT MAN-MADE CO₂ CAUSES GLOBAL WARMING

GLOBAL BOILING



The
Economist

Race and college

What will Lula do?

Big tech falls to earth

China's Taiwan-ready generals

NOVEMBER 5TH-11TH 2022

SAY GOODBYE TO 1.5°C

Why climate policy is off target



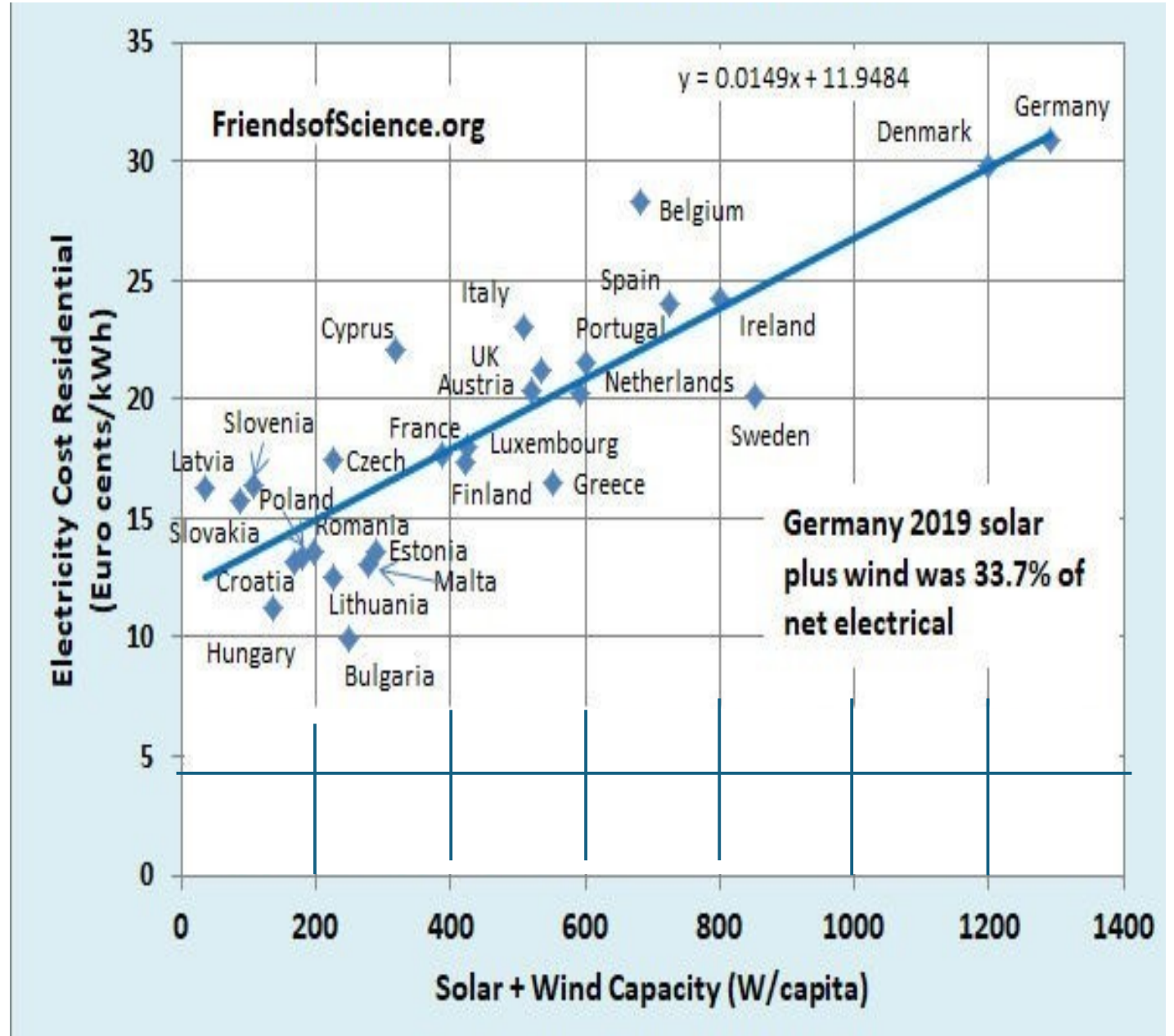
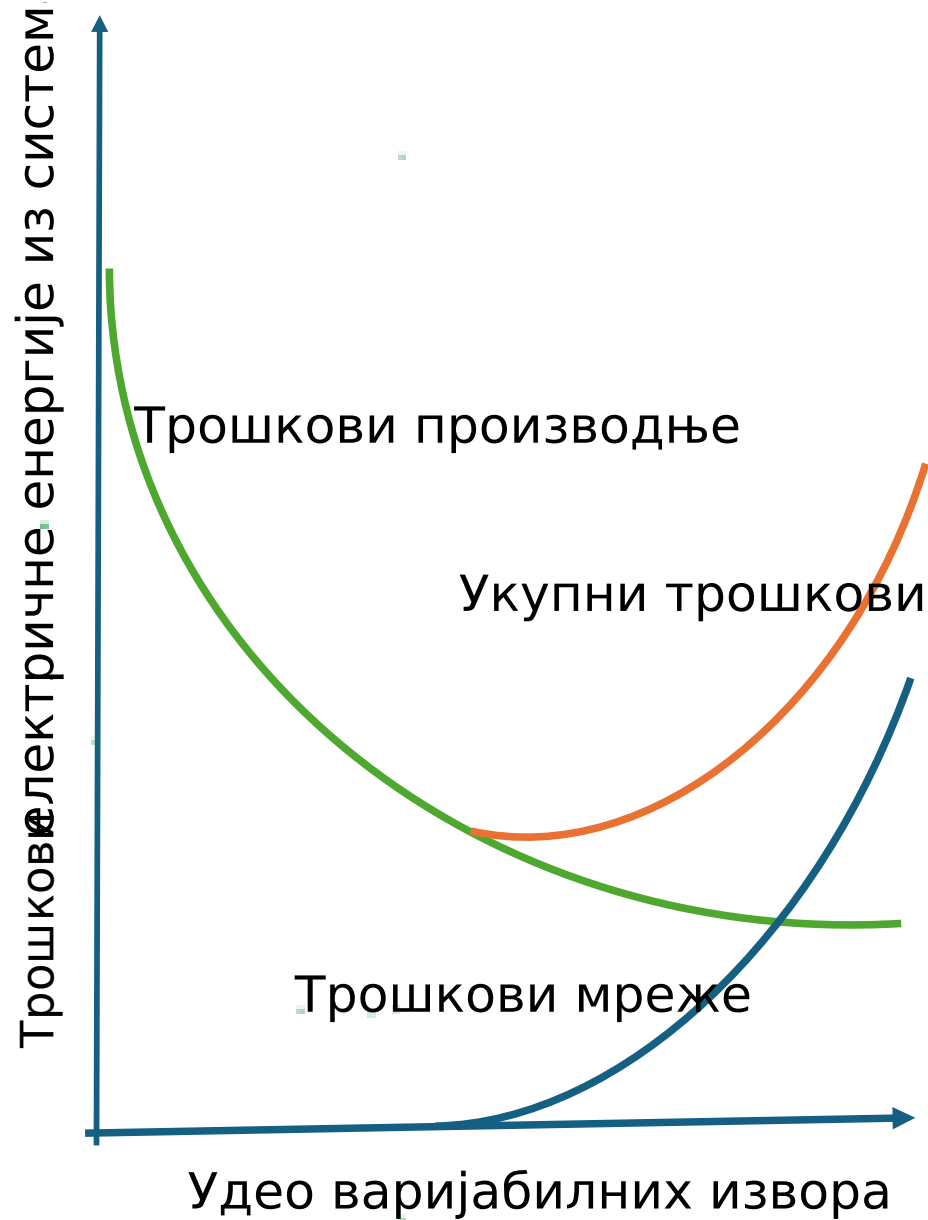
Net Zero – Not
Zero



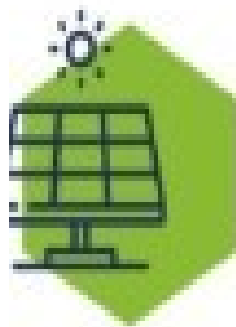
EUROPE'S GREEN EXPERIMENT A COSTLY FAILURE IN UNILATERAL CLIMATE POLICY

John Constable

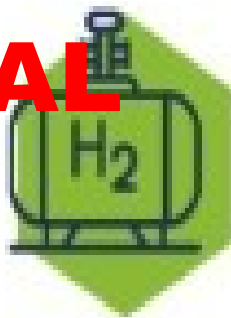
CENOVNI PARADOKS



EU GREEN DEAL



Solar photovoltaic
and solar thermal



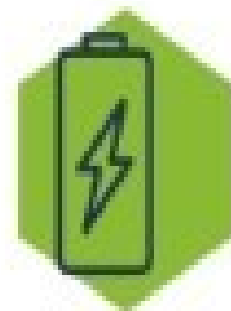
Electrolysers
and fuel cells



Onshore wind and
offshore renewables



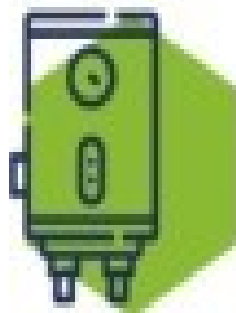
Sustainable
biogas/
biomethane



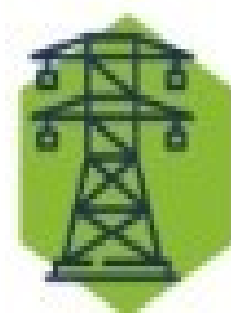
Batteries
and storage



Carbon capture
and storage



Heat pumps and
geothermal energy

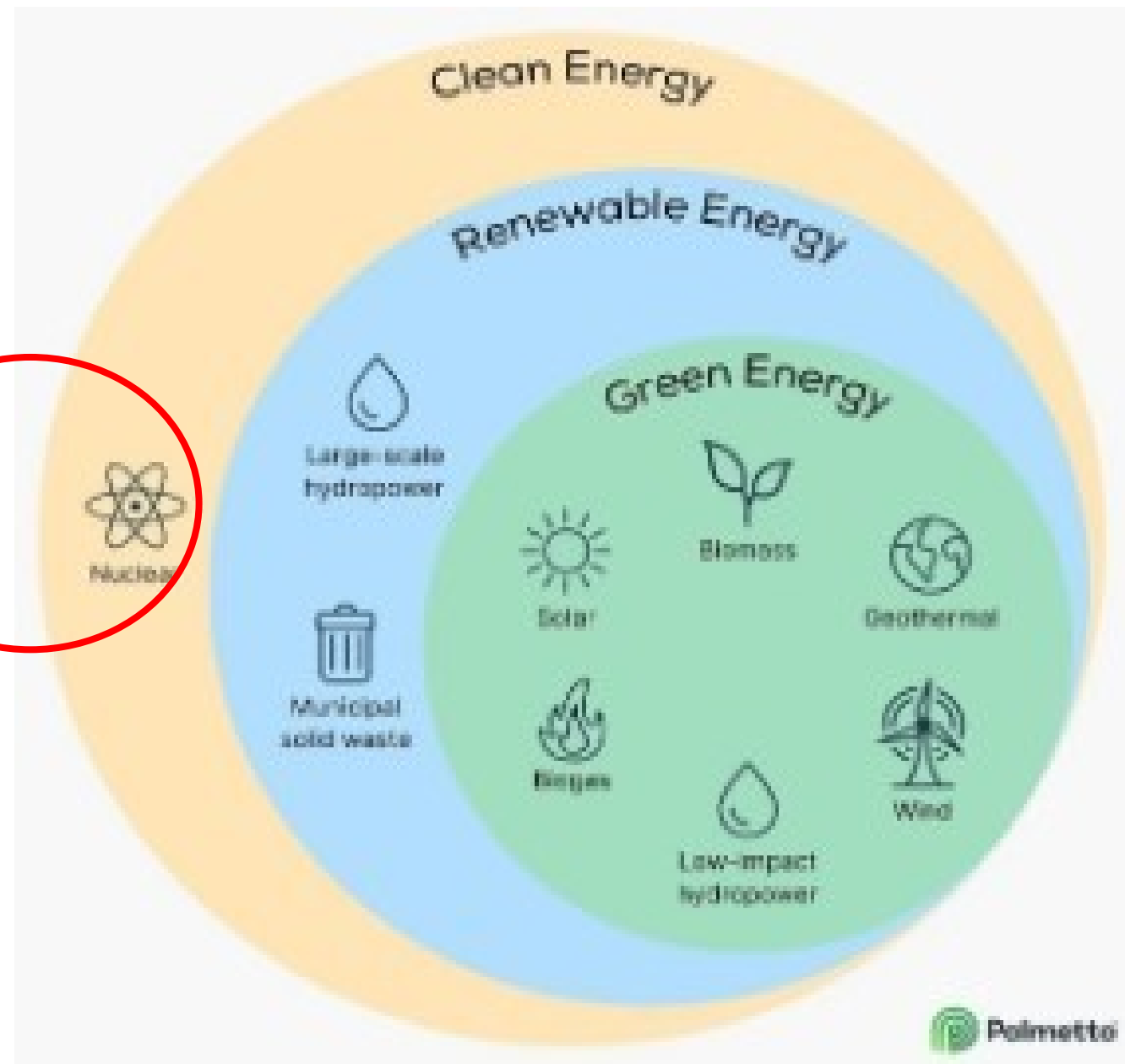
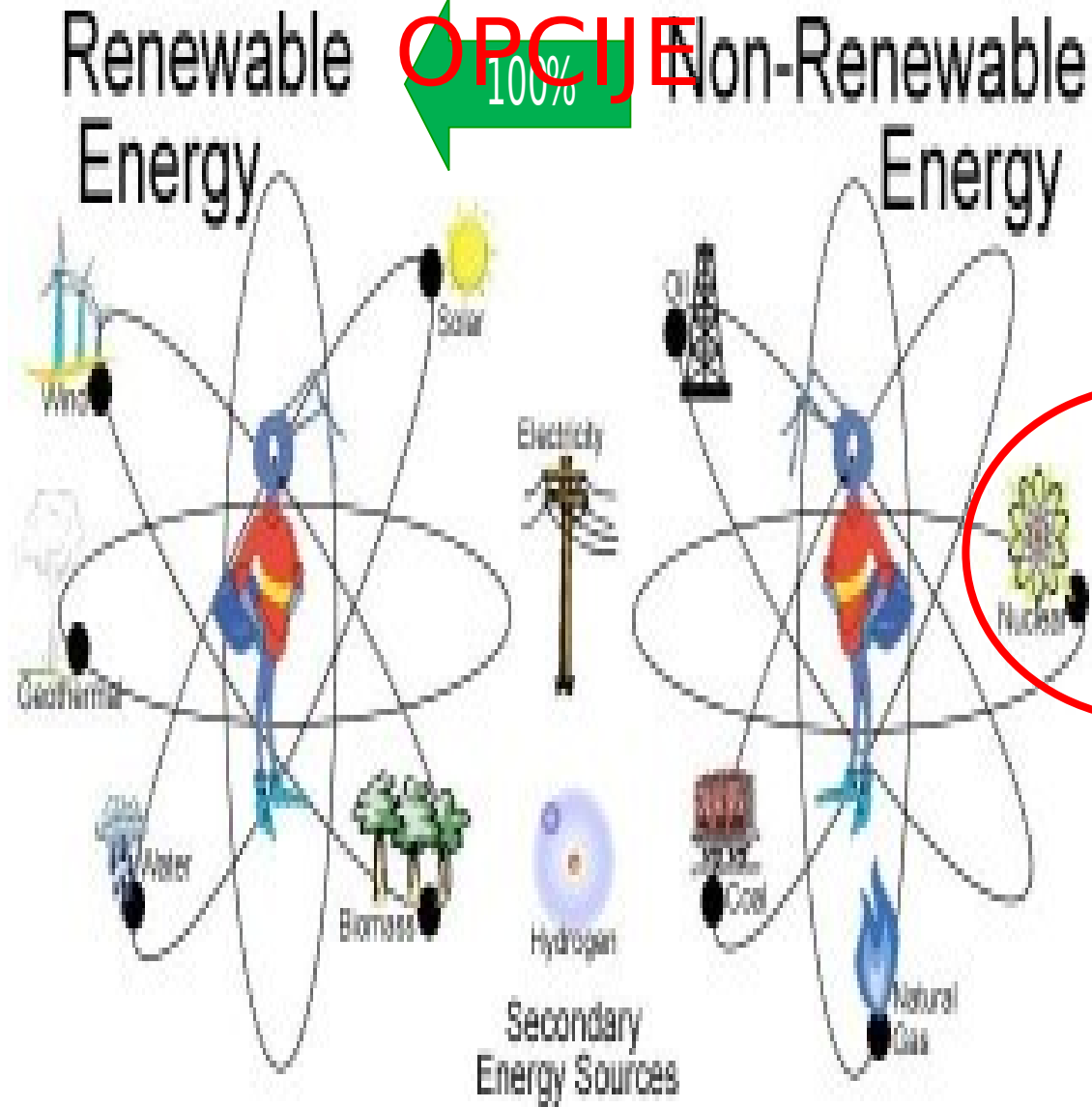


Grid technologies

EU Net-Zero Industry
Act

POVRATAK „OTPISANE“ NUKLEARNE

OPCIJE
100%



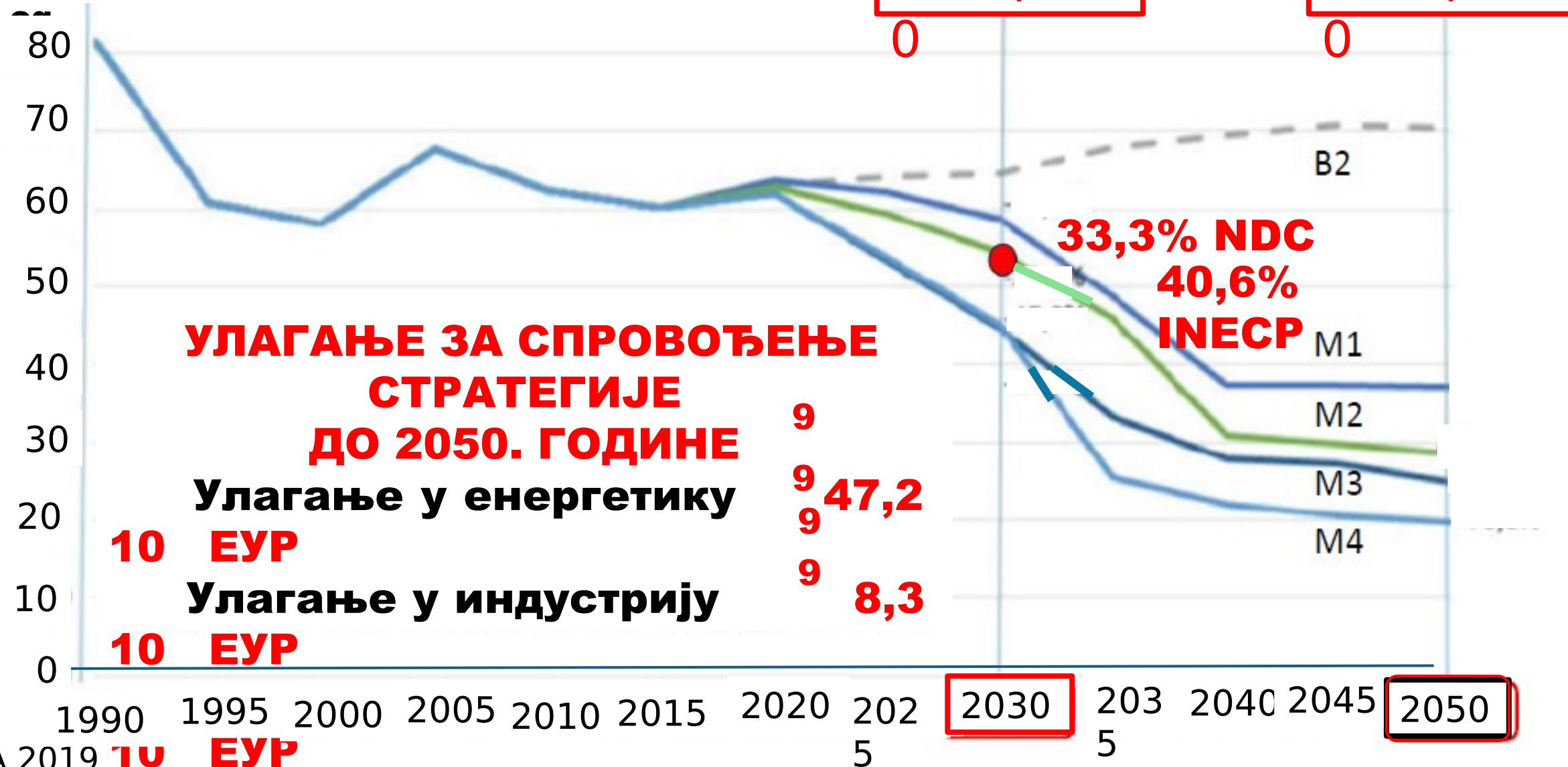
СТРАТЕГИЈА НИСКОУГЉЕНИЧНОГ РАЗВОЈА Р.С. ДО

MtCO₂

2050.

2030/199

2050/199



prvenstveno iz velikih hidroelektrana.

Hidroenergija: Hidroelektrane čine oko **80%** proizvodnje čiste energije u Srbiji. Ukupna instalisana snaga hidroelektrana iznosi preko **2.400 MW**, uz dodatne kapacitete reverzibilnih hidroelektrana.

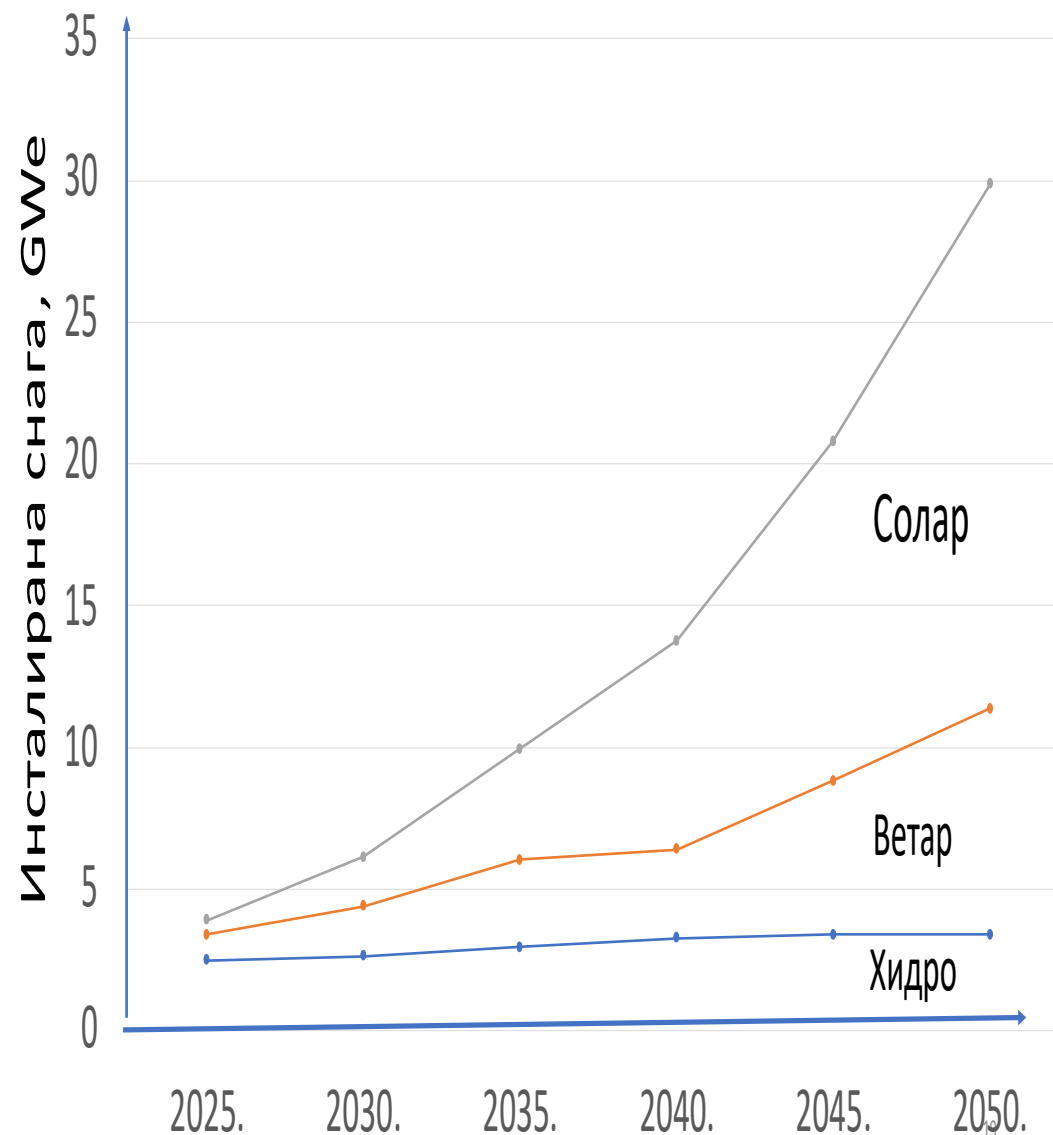
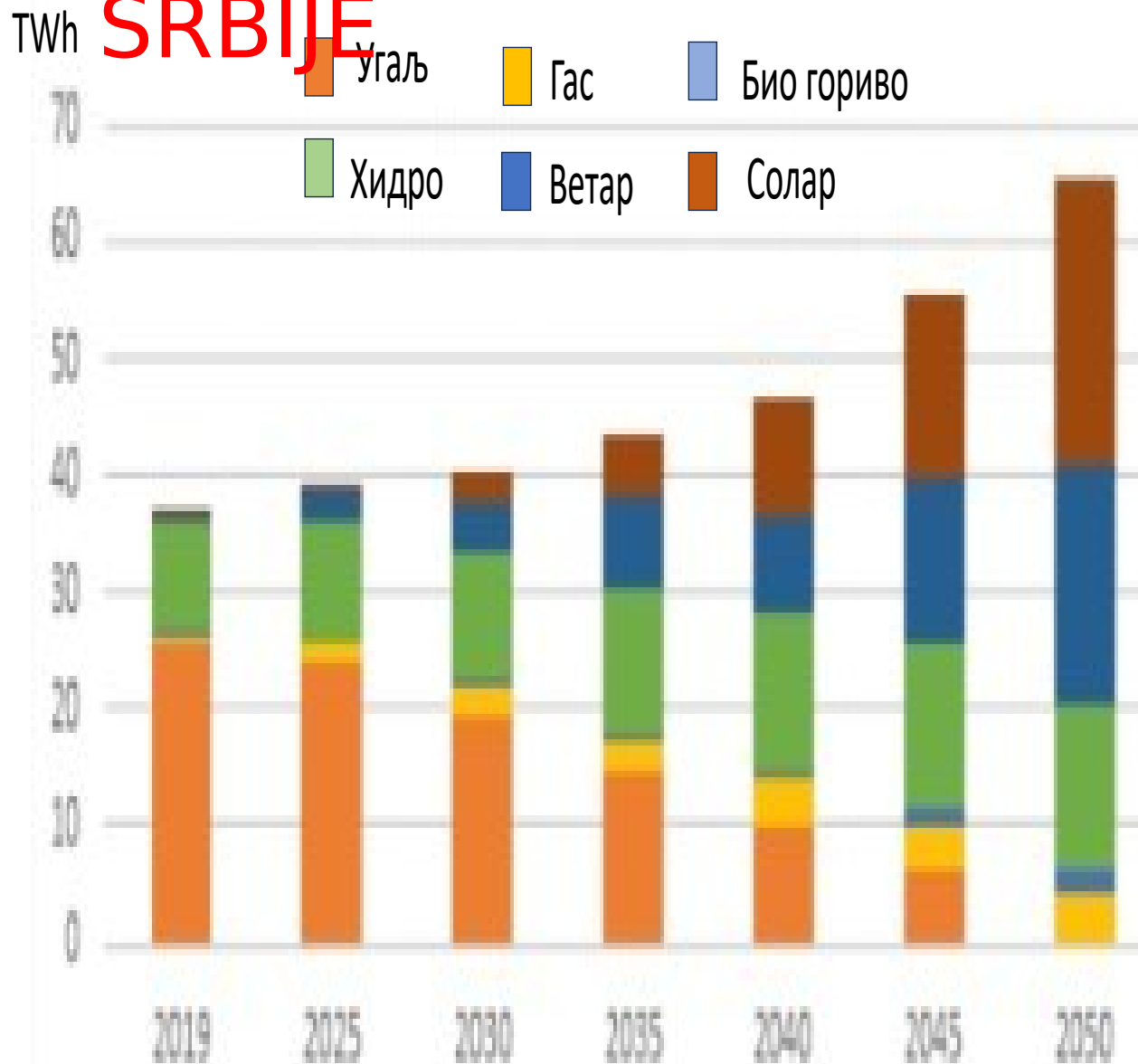
Vetroenergija : U funkciji je preko **800 MW** vetroparkova širom zemlje. **U razvoju:** Planirani su **gigavati** novih kapaciteta iz vetra kroz aukcije i investicije

Solarna energija: Solarni parkovi i prozumeri (kupci-proizvođači) beleže rast sa preko **390 MW** operativnih i instalisanih kapaciteta. **Projekti:** U planu su velika solarna postrojenja kombinovana sa baterijskim skladištima.

Biomasa i biogas: Preko **60** postrojenja za proizvodnju električn energije iz biogasa **Geotermalan potencijal:** Srbija ima izuzetno povoljan geotermalni potencijal, ali se on i dalje nedovoljno koristi za direktno grejanje i energetske sistem

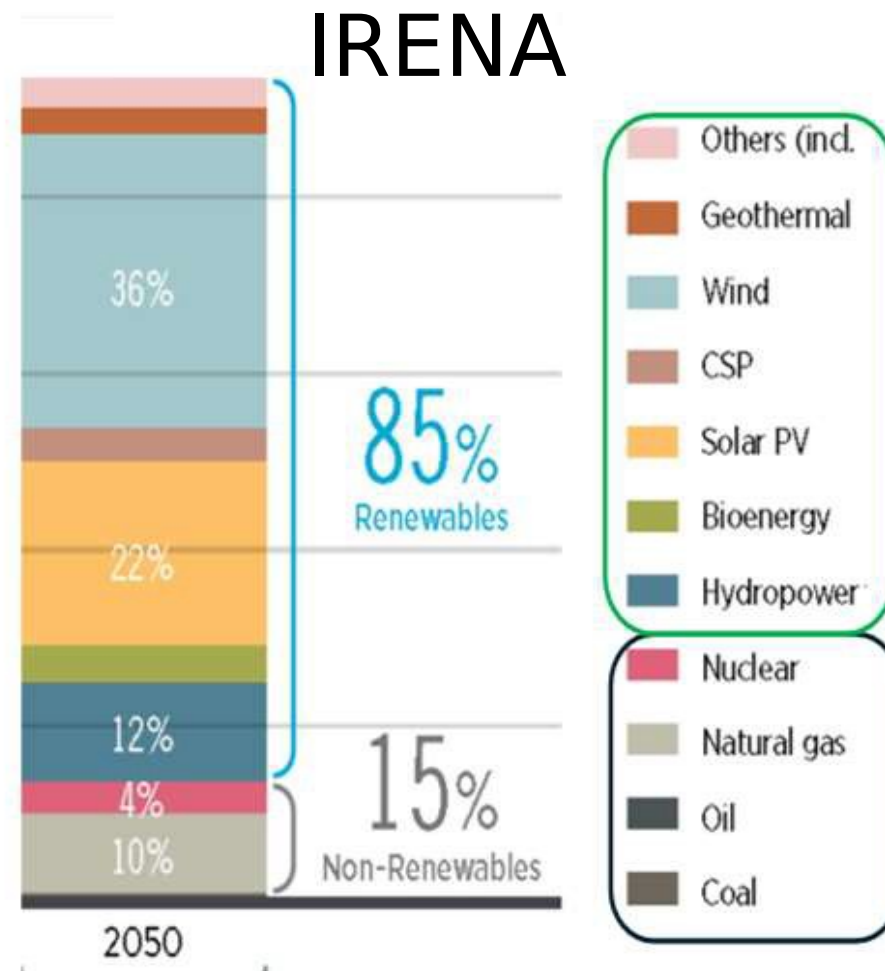
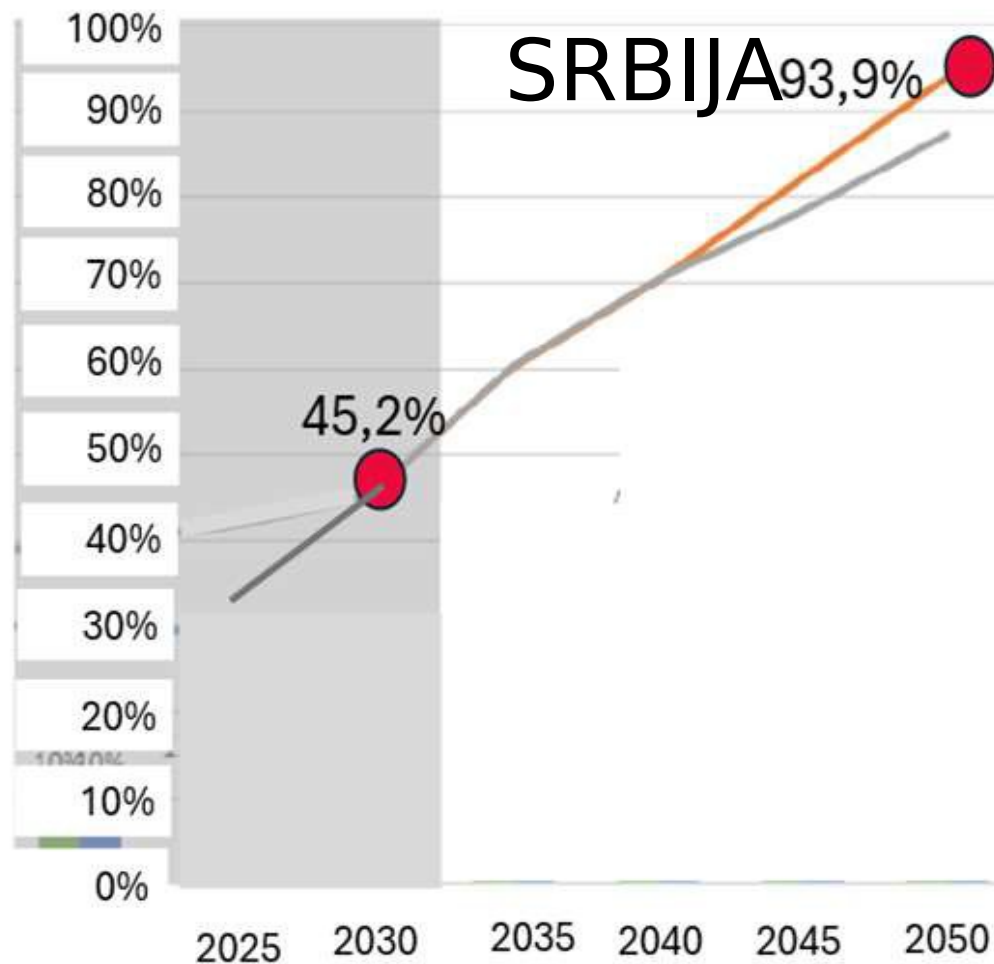
U 2023 proizvedeno 40.0 TWh: 23.6 TWh ugalj 13.1 TWh hidro; 2.0 TWh gas; 1.1 TWh vetar; 0.3 TWh biogoriva & otpad

INTEGRISANI ENERGETSKI I KLIMATSKI PLAN SRBIJE



ПРОЈЕКТОВАНИ УДЕО ОИЕ ЗА 2030. И 2050.

Удео ОИЕ у производњи електричне енергије



IAEA NEPI O

1. Законодавни и регулаторни оквир
2. Нуклеарна сигурност и заштита
3. Информисање јавности
4. Образовање домаћих кадрова
5. Укључивање заинтересованих страна
6. Организовање система управљања
7. Избор модела финансирања изградње
8. Организовање ланаца снабдевања
9. Избор типа нуклеарне технологије
10. Избор оптималне локације за електрану
11. Укључивање у електроенергетску мрежу
12. Могуће ангажовање домаће индустрије
13. Обезбеђење заштите животне средине
14. Избор циклуса нуклеарног горива
15. Управљање радиоактивним отпадом
16. Спречавање нуклеарне пролиферације
17. Избор мера нуклеарне безбедности
18. Организовање физичке заштите објекта
19. Поступање у ванредним ситуацијама

SRBIJA POSLE
UKIDANJA
ZABRANE
GRADNJE NE

ДВЕ РАДНЕ
ГРУПЕ



ШЕСТ
ПОДГРУПА

Izvor: mre.gov.rs

NE U SVETU 2025



Under Construction

81 349

MW(e) Net Capacity

78 reactors

17 countries



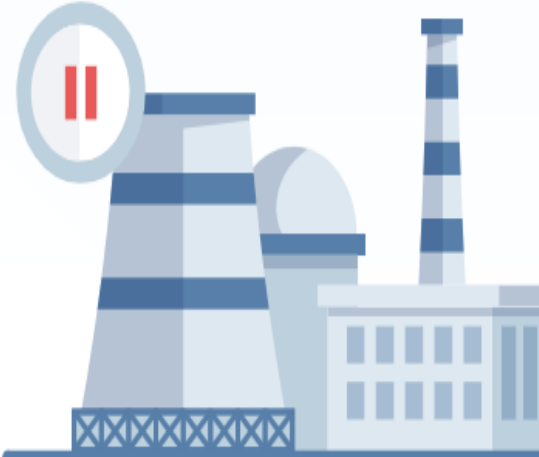
In Operation

379 611

MW(e) Net Capacity

417 reactors

31 countries



Suspended Operation

19 387

MW(e) Net Capacity

21 reactors

2 countries



Electricity Produced (2025)

2 635.3

TWh

2 013.4 GWh

Electrical equivalent of heat for NEA

Emerging Nuclear Energy Countries

- In Europe **11**: Albania, Croatia, [Estonia](#), Ireland, Italy, Latvia, [Lithuania](#), Norway, [Poland](#), [Serbia](#), [Turkey](#).
IAEA (Updated Friday, 4 September 2026)
- In the Middle East and North Africa **14**: Iraq, Kuwait, Israel, [Jordan](#), Qatar [Saudi Arabia](#), Yemen, Algeria, [Egypt](#), Libya, Morocco, Sudan, Syria, Tunisia.
- In west, central and southern Africa **10**: Ethiopia, Ghana, Kenya, Namibia, Nigeria, Rwanda, Senegal, Tanzania, Uganda, Zambia.
- In Central and South America **8**: Bolivia, Chile, Cuba, Ecuador, El Salvador, Paraguay, Peru, Venezuela.
- In Central and Southern Asia **7**: Azerbaijan, [Bangladesh](#), Georgia, [Kazakhstan](#), Mongolia, Sri Lanka, [Uzbekistan](#).
- In Southeast Asia and Oceania **10**: [Australia](#), Cambodia, [Indonesia](#), Laos, Malaysia, Myanmar, [Philippines](#), Singapore, Thailand, [Vietnam](#).
- In East Asia **1**: North Korea

COP28: THREE TIMES MORE INVESTMENT IN RES BY 2050



РИЗИЦИ ТРАНЗИЦИЈЕ



КРИТИЧНИ
МИНЕРАЛИ
ЗАУЗЕТЕ
ПОРЦИЈЕ
ОТПАД,
ФИНАНСИРАЊЕ...

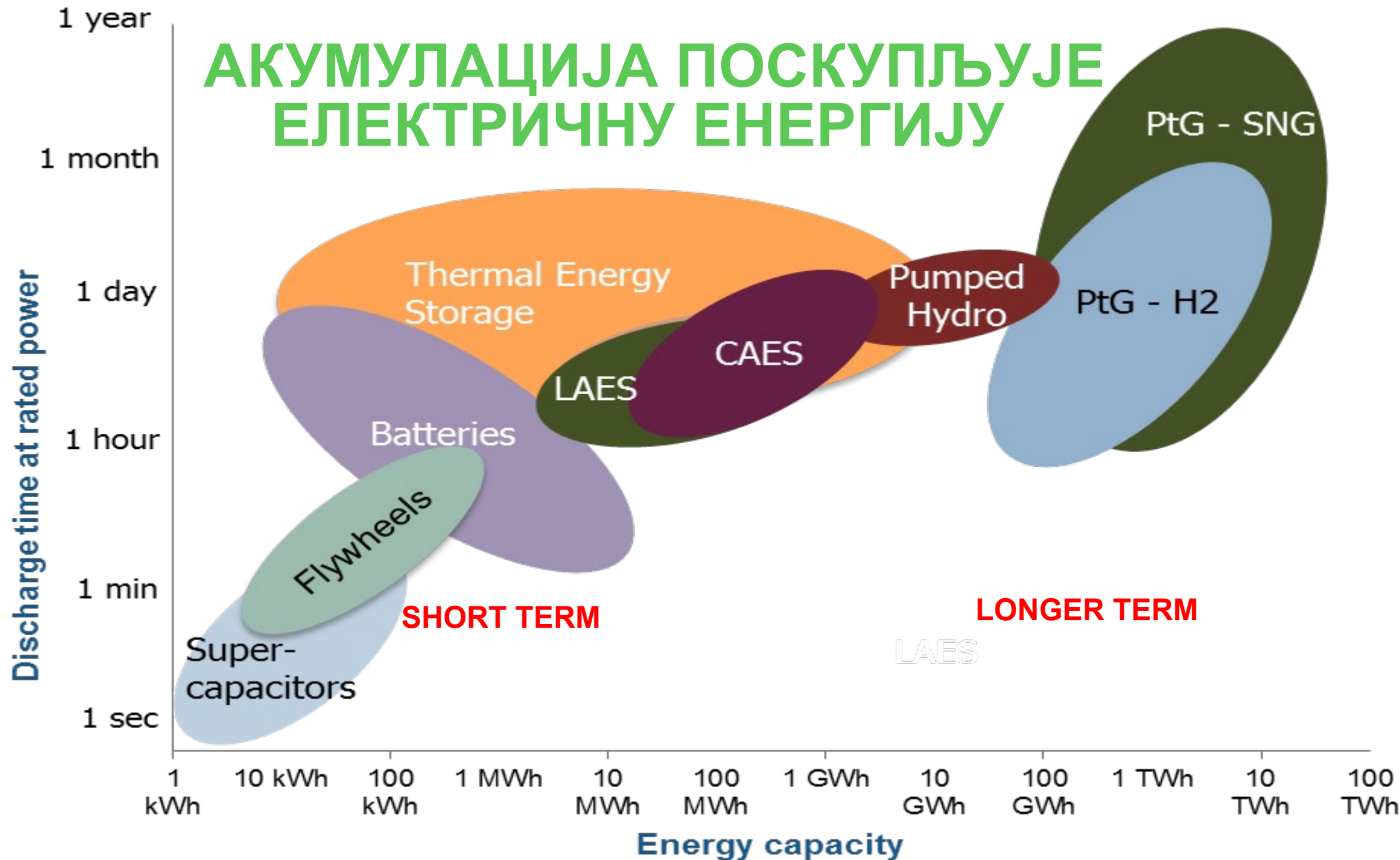
OIE I(LI) HRANA?



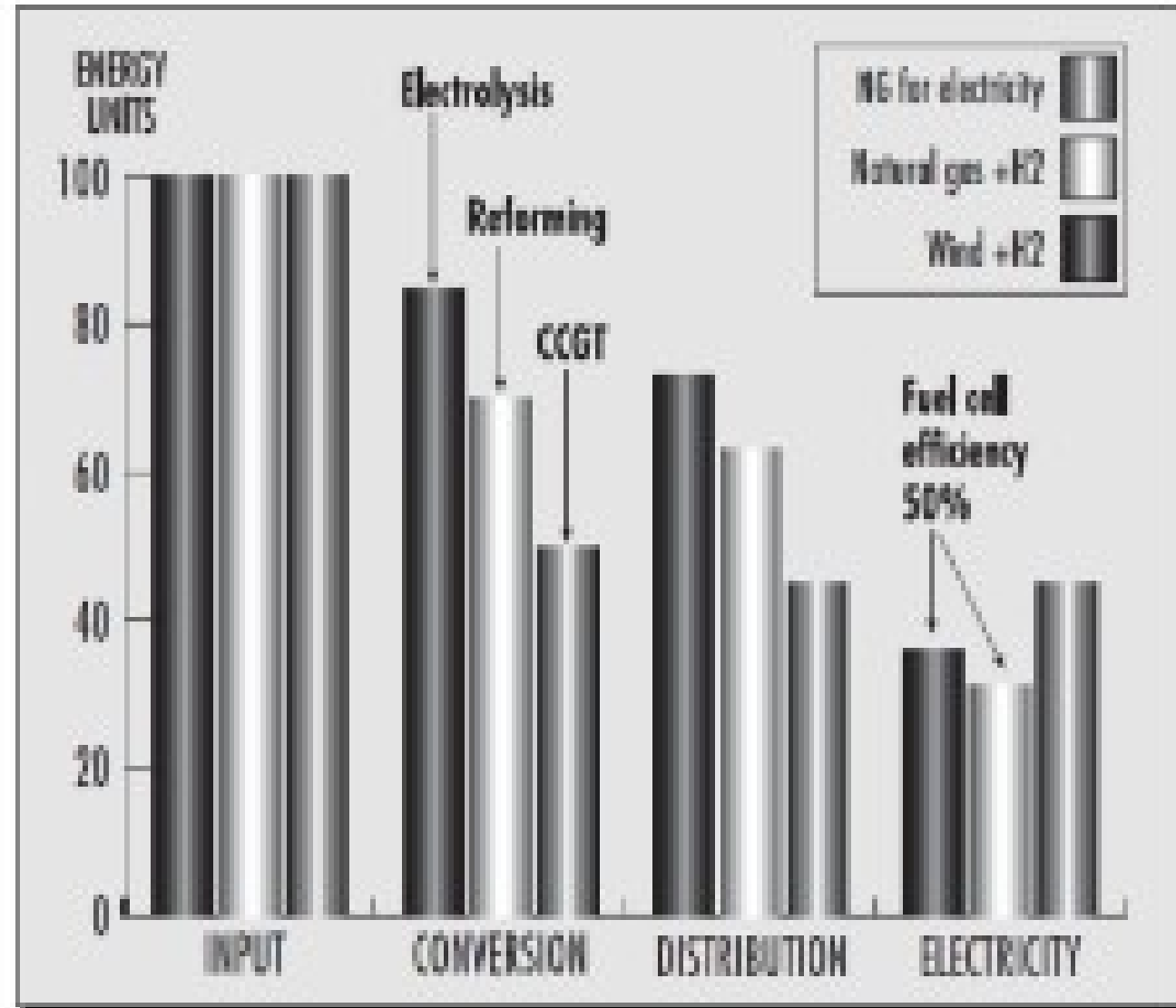
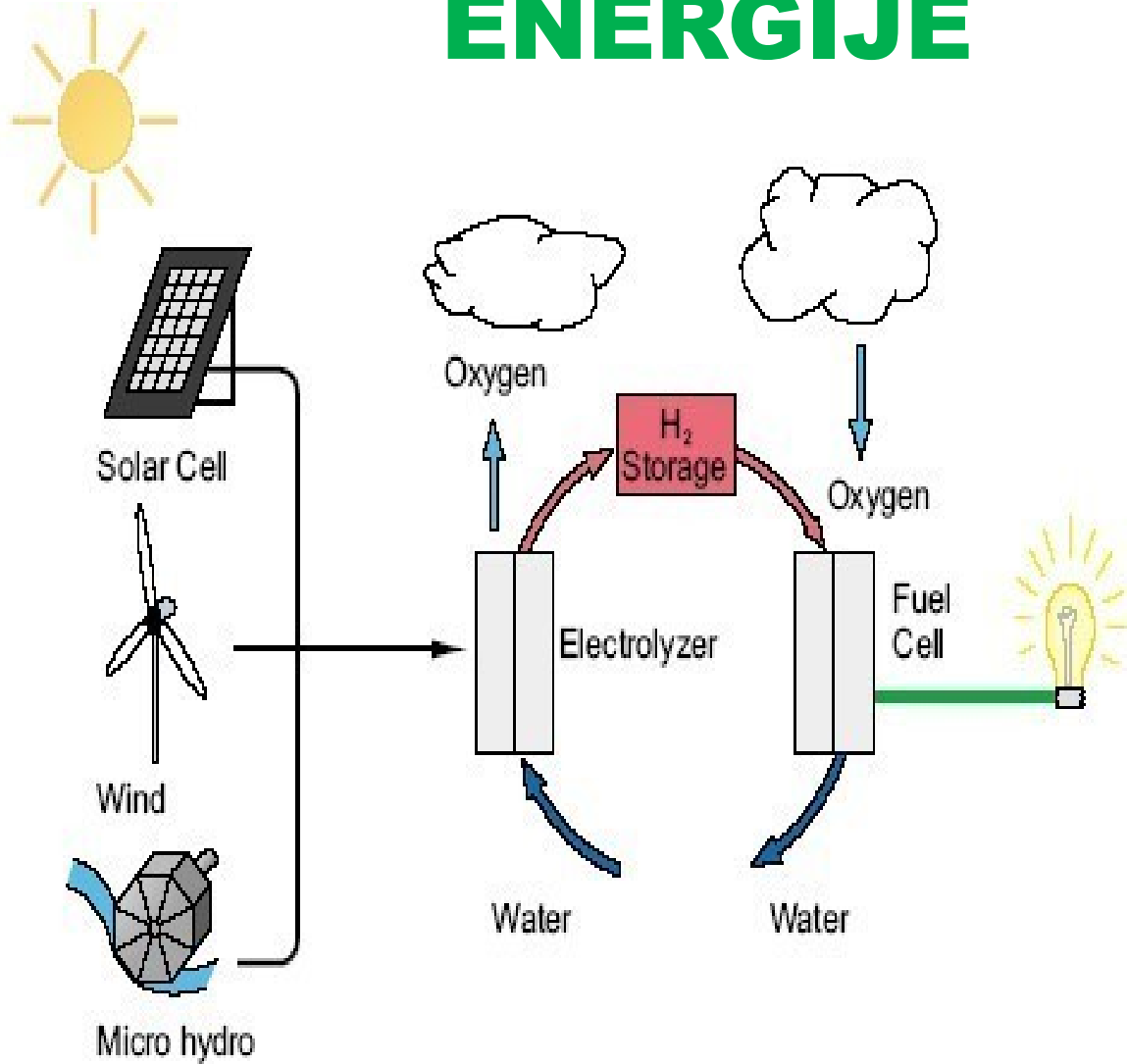
An aerial photograph of a large-scale solar farm. The image shows a vast expanse of solar panels arranged in neat, parallel rows that stretch far into the distance, creating a strong sense of perspective. The panels are a deep blue color. In the bottom left corner, there is a small area of greenery and some structures, possibly a parking lot or a small building. The overall scene is bright and clear, suggesting a sunny day.

WE NEED TO SAVE THE PLANET
FROM THE PEOPLE WHO ARE
SAVING THE PLANET.

АКУМУЛАЦИЈА ПОСКУПЉУЈЕ ЕЛЕКТРИЧНУ ЕНЕРГИЈУ

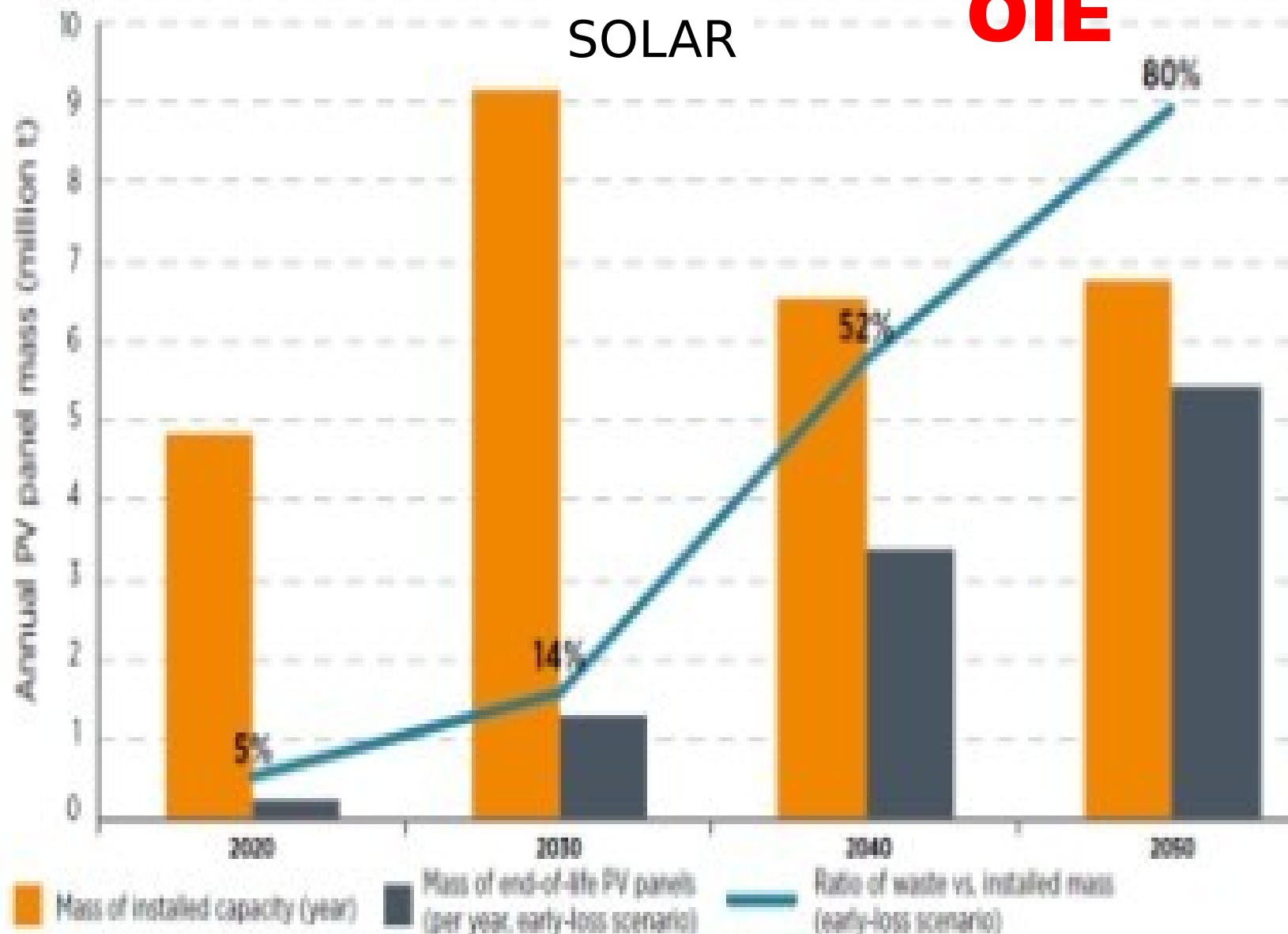


VODONIČNA AKUMULACIJA ENERGIJE



PROBLEM SKLADIŠTENJA OTPADA IZ

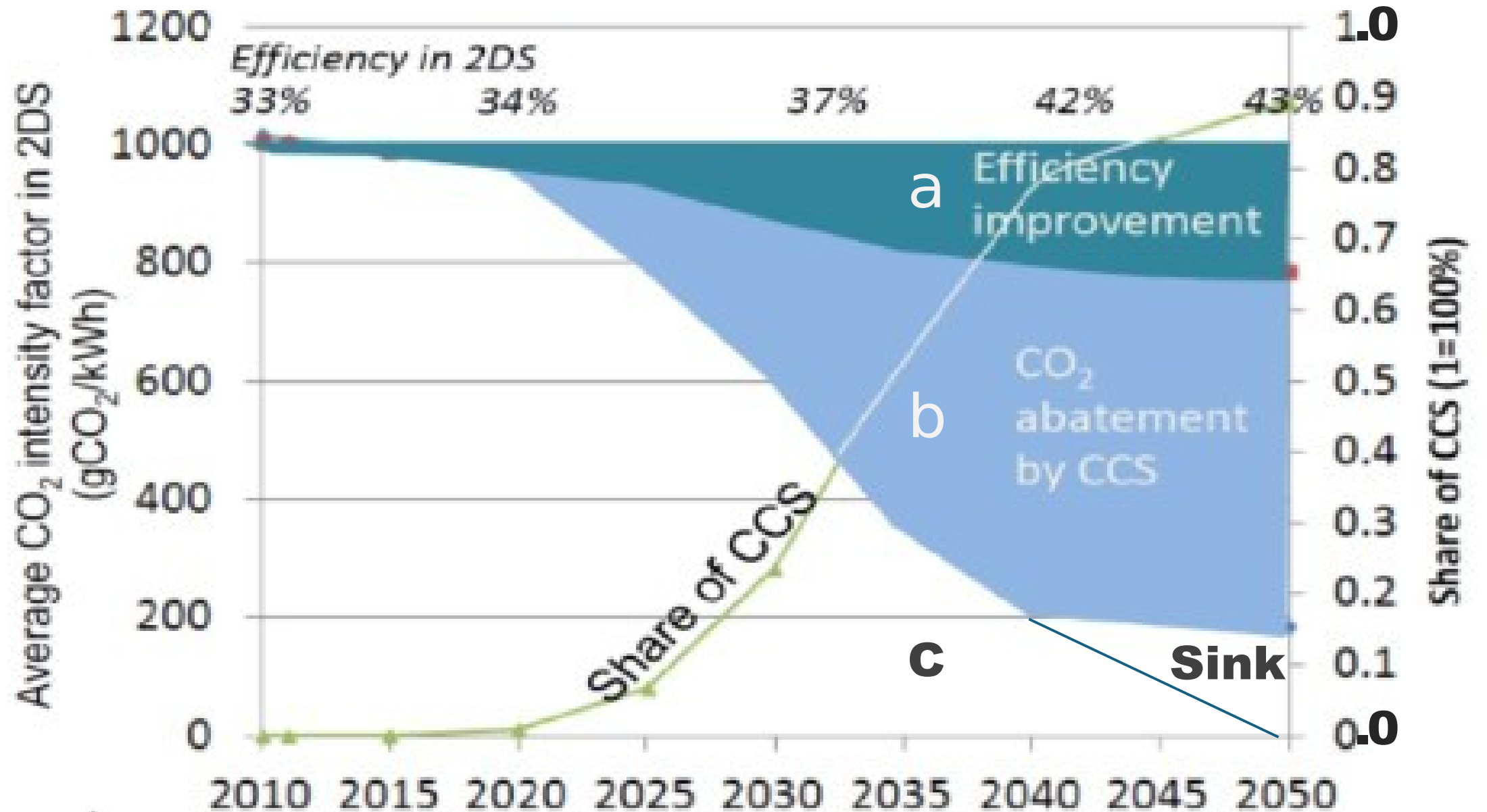
OIE



WIND



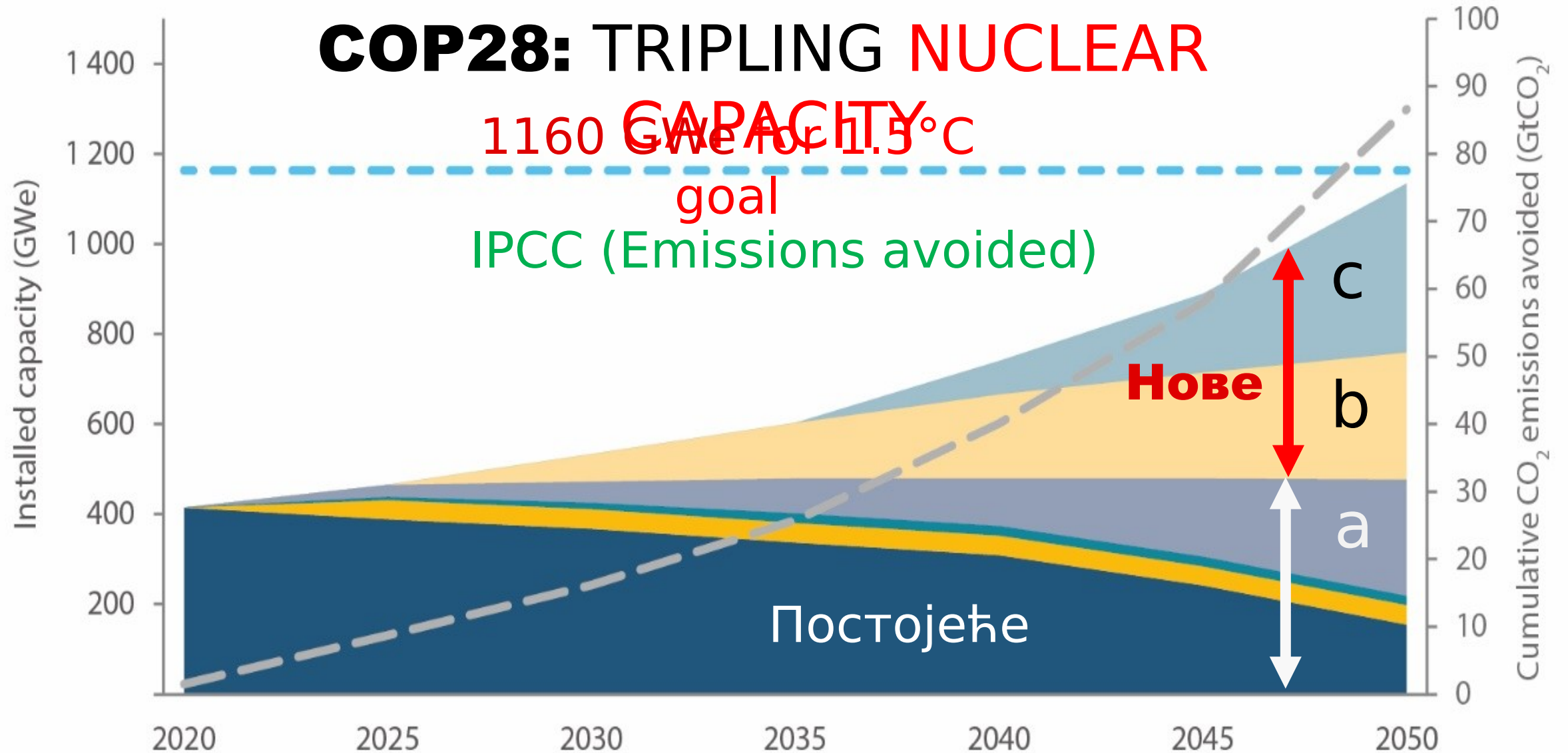
FOSILNA ALTERNATIVA



COP28: TRIPLING NUCLEAR

1160 GWe for 1.5°C
goal

IPCC (Emissions avoided)



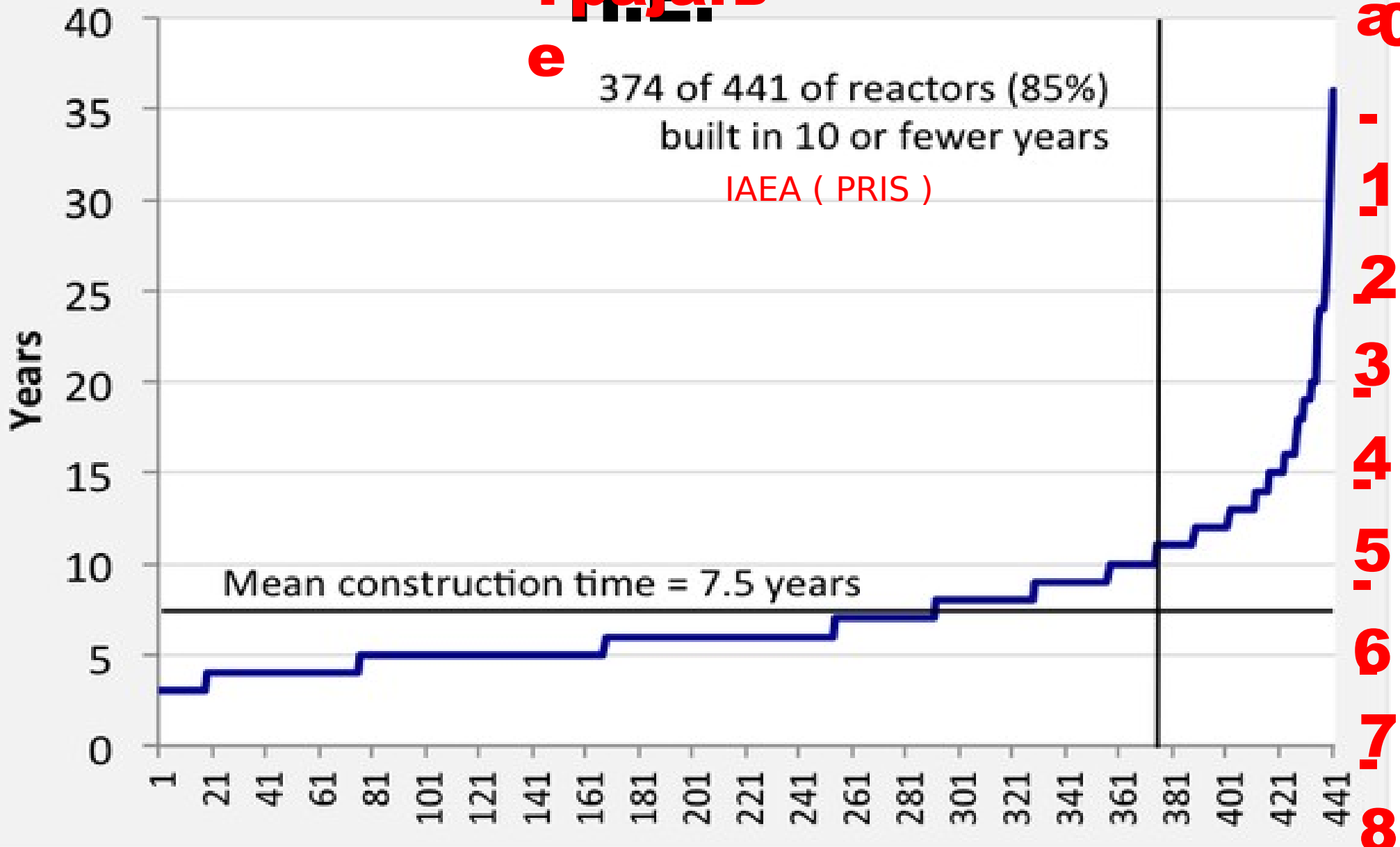
— Cumulative emissions avoided

— IPCC 1.5°C scenarios (2050 average) = 1 160 GW nuclear capacity (based on the average of IPCC 1.5°C scenarios)

ТРАЈАЊЕ И ДИНАМИКА ИЗГРАДЊЕ

Трајање

374 of 441 of reactors (85%)
built in 10 or fewer years
IAEA (PRIS)



Динамик
а КРАЈ

7 %

11

2 %

2 %

1 %

1 %

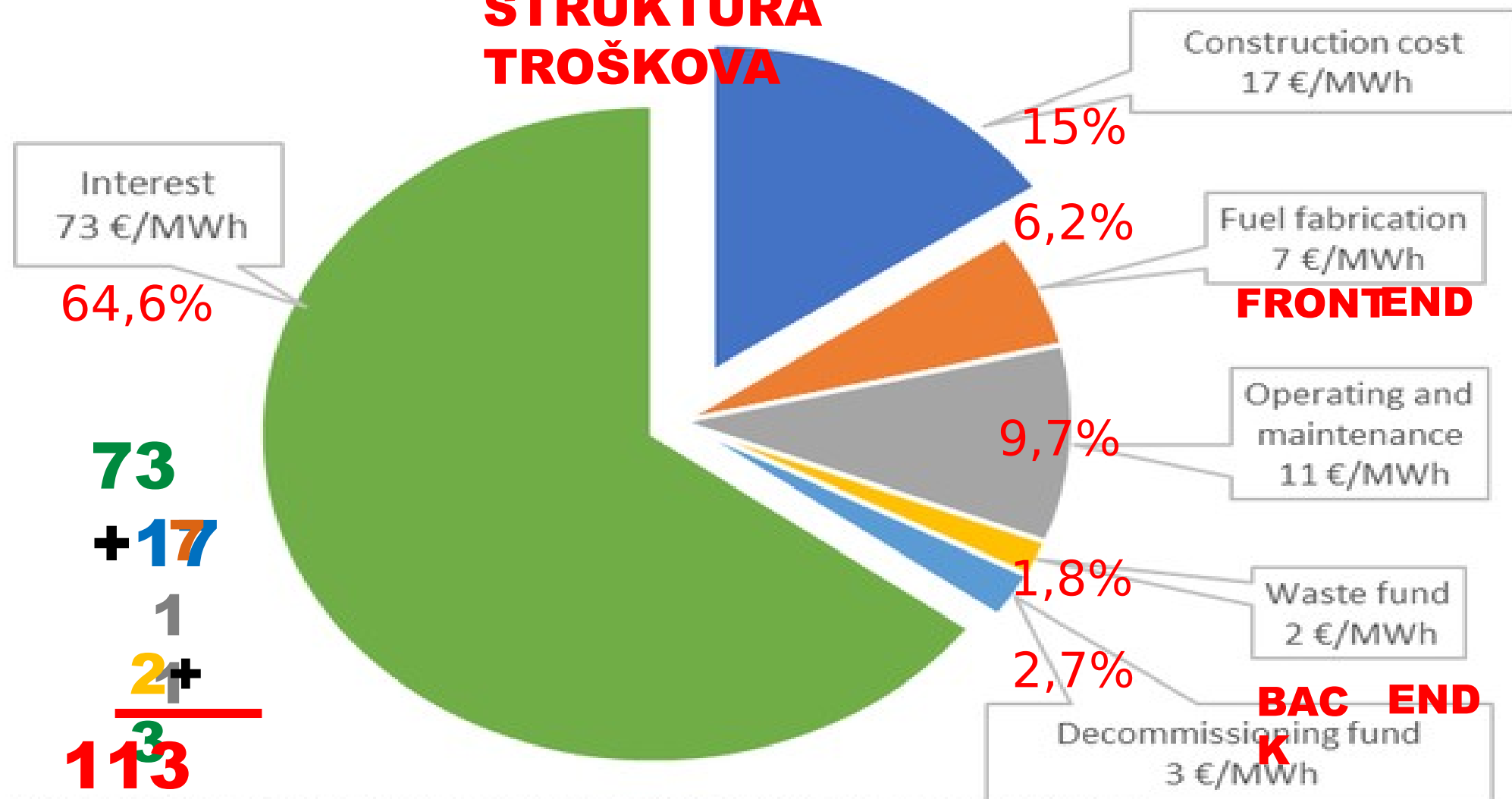
4 %

2 %

Procena

Hinkley Point C nuclear power plant

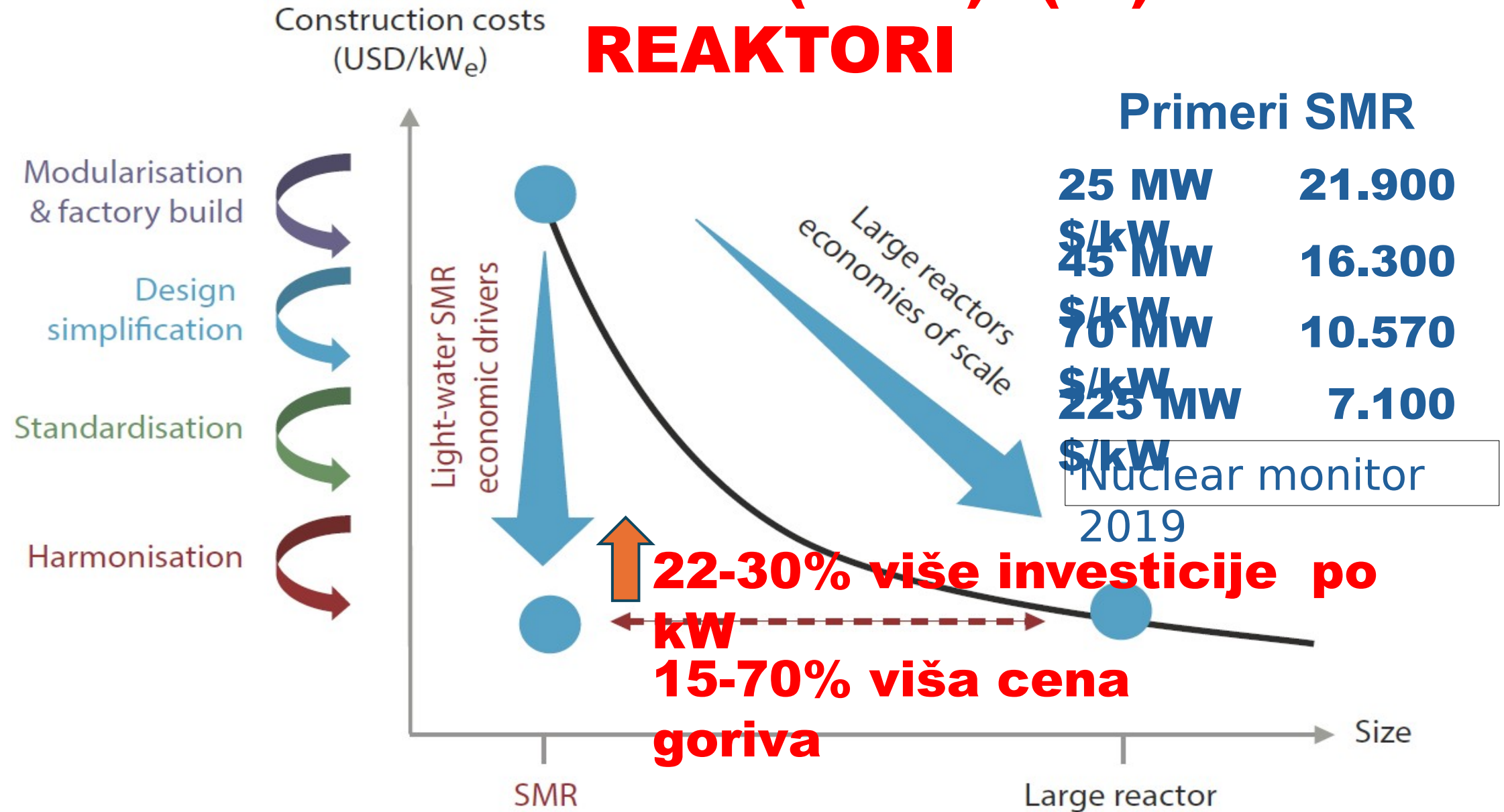
STRUKTURA TROŠKOVA



Price paid per MWh for power generated during first 60 years is assumed equal to the CfD strike price (113 €/MWh in 2019 prices).

73
+17
1
2+
3
113
€/MWh

MALI MODULARNI (SMR) I (LI) VELIKI REAKTORI

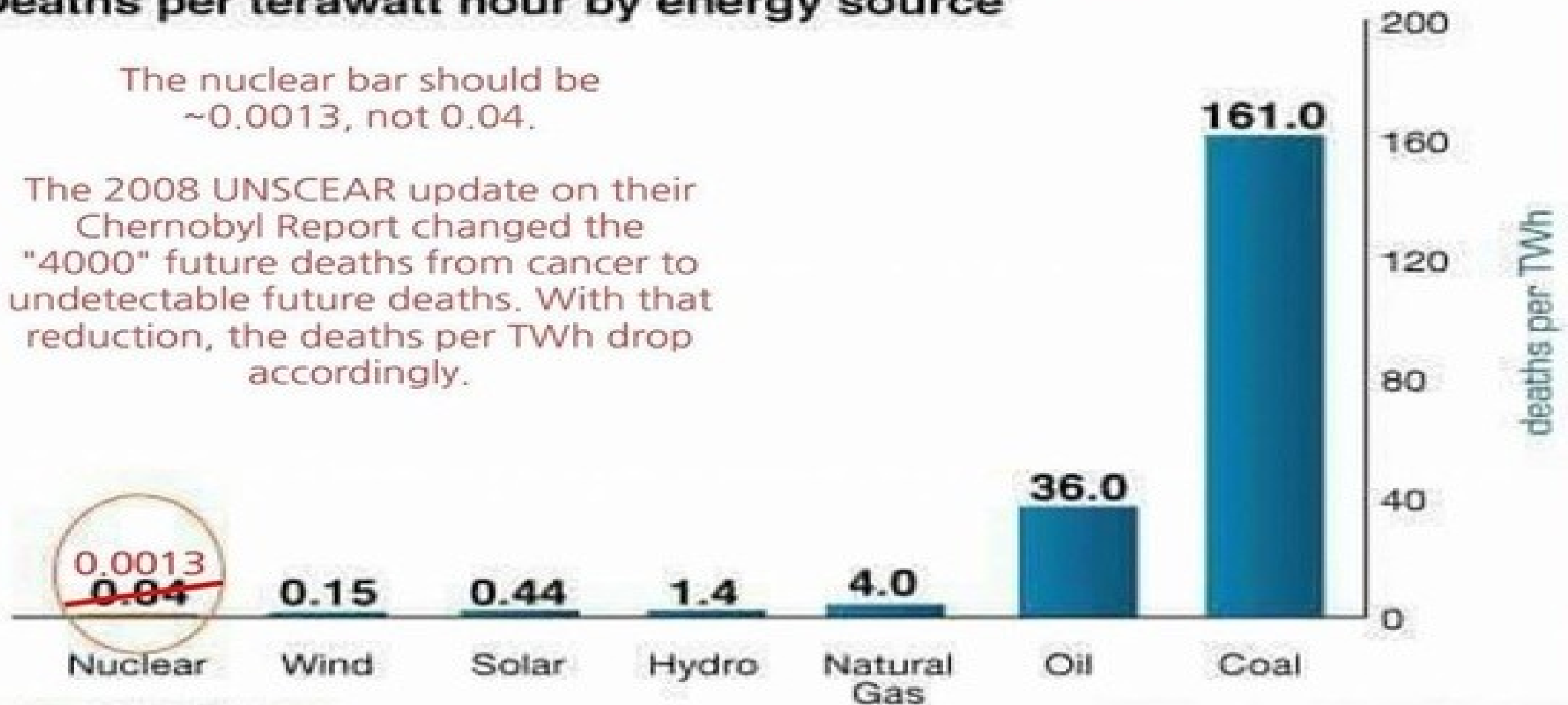


Nuclear: The Safest Energy Source of All

Deaths per terawatt hour by energy source

The nuclear bar should be
~0.0013, not 0.04.

The 2008 UNSCEAR update on their
Chernobyl Report changed the
"4000" future deaths from cancer to
undetectable future deaths. With that
reduction, the deaths per TWh drop
accordingly.



NUCLEAR POWER: MYTH VS. REALITY

THE MYTH



Myth: Nuclear plants can explode like atomic bombs.



Myth: Living near a plant exposes you to high radiation.

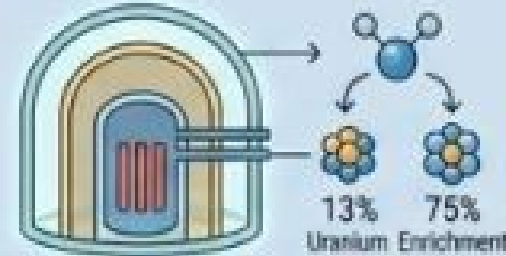


Myth: Nuclear energy is "dirty" and bad for the climate.



Myth: Nuclear waste is a green liquid glowing in drums.

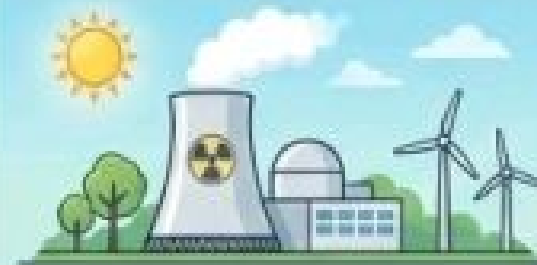
THE REALITY



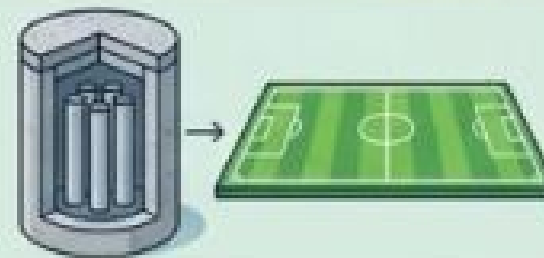
Reality: PHYSICALLY IMPOSSIBLE. Plant uses 3% to 5% low-enriched uranium U^{235} , not 90%+ weapons grade. Reactor physics prevents explosions.



Reality: You receive more radiation from eating a banana or flying a plane. Person within 50 miles of a plant gets about **\$0.0001 mSv/year—less than a single chest X-ray.**



Reality: Nuclear is a zero-emission power source. No carbon dioxide or air pollutants during operation. Life-cycle carbon footprint is comparable to wind power.



Reality: Most waste is solid fuel rods stored in dry casks. The volume is tiny; all US nuclear waste nuclear waste from 60 years would fit on a single football field 10 yards deep.