

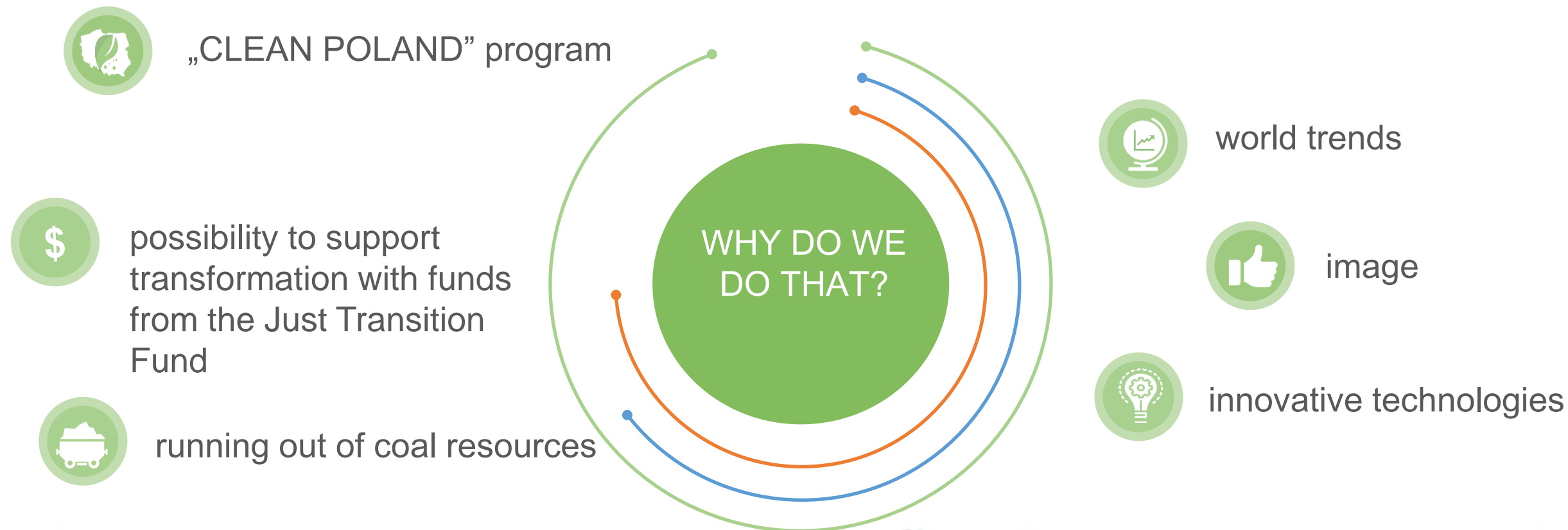
Strategy Directions



ZE PAK SA

Poland's Clean Energy

MAIN REASONS OF ZE PAK TRANSFORMATION





The need of energy transformation in Poland

- Full determination to implement the EU climate policy
- ZE PAK is ready for a quick transformation towards green energy, the need for financial support
- ZE PAK wants to use the support under the Just Transition Mechanism

An investment in green hydrogen as the fuel of the future

- Green hydrogen offers the potential to decarbonise a number of industries where it is difficult to significantly reduce CO2 emissions
- As renewable energy production costs decrease, the potential for green hydrogen production will increase
- Hydrogen may contribute to building the energy independence of Poland and Europe, independence from the import of fossil fuels

With the support of EU funds, in particular the Just Transition Mechanism, ZE PAK is prepared for the fast transformation path from coal to renewable energy.



STRATEGIC GOAL 1

Energy transformation from coal to RES – from black to green energy.

STRATEGIC GOAL 2

Europe's first nationwide **full value chain for building a green hydrogen economy** - an investment in the future, CO2 reduction, clean air and zero-emission fuel of the future..

The strategic goals will be realized on the foundation of just transition, decarbonisation and advanced technologies.

„An important element of the Green Deal is the commitment *to make the transition socially fair* and that no region is left behind. (...) Such a transformation *cannot take place if it is not approved by the inhabitants*”

Frans Timmermans - Vice-President of the European Commission

ZE PAK IN NUMBERS (2019)



EMPLOYMENT: **4 611** employees



ANNUAL TAXES: PLN **597.5** m



ADDED VALUE (≈GDP): PLN **887.7** m



ELECTRICITY PRODUCTION: **5.7** TWh net

SOCIAL IMPACT

23
communes
in the Greater
Poland
voivodship

nearly
300 thousand
inhabitants



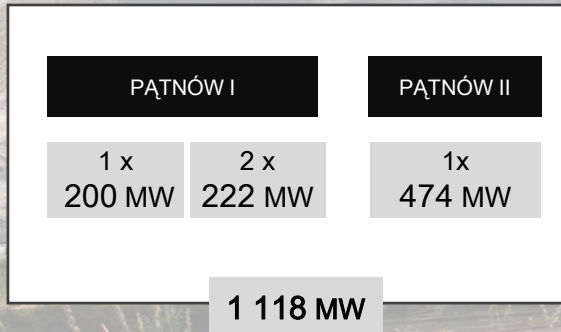
Source: gminy.pl

**ZE PAK GROUP KEY PARTICIPANT OF THE TRANSFORMATION OF THE EASTERN
WIELKOPOLSKA REGION TOWARDS EMISSION NEUTRALITY**

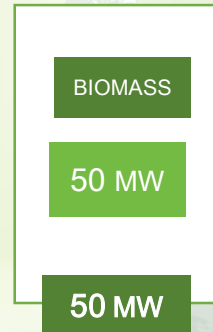
WHAT DO WE WANT TO ACHIEVE?

CURRENT STATE

COAL ENERGY

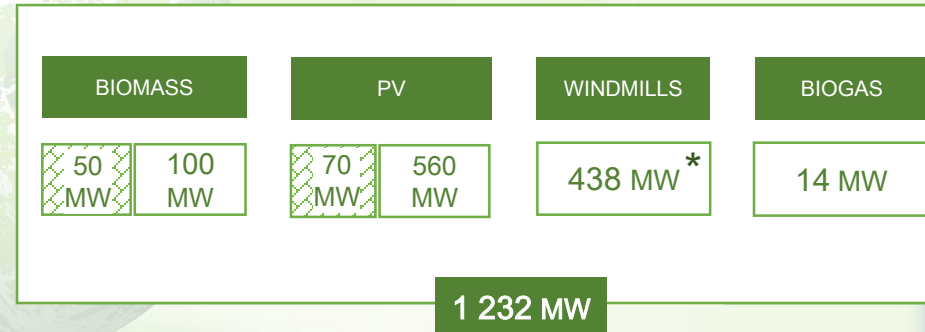


RES ENERGY



DEVELOPMENT PLANS

RES ENERGY



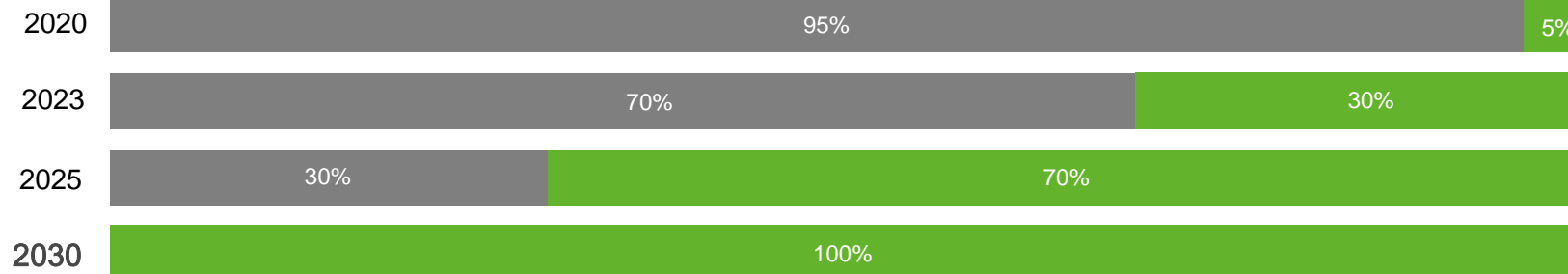
NEW TECHNOLOGIES

- HYDROGEN PRODUCTION
- HYDROGEN BUSES
- ENERGY STORAGE
- HYDROGEN BOATS

* Assuming regulatory changes (a.k.a 10H)

structure of installed capacity by fuel type

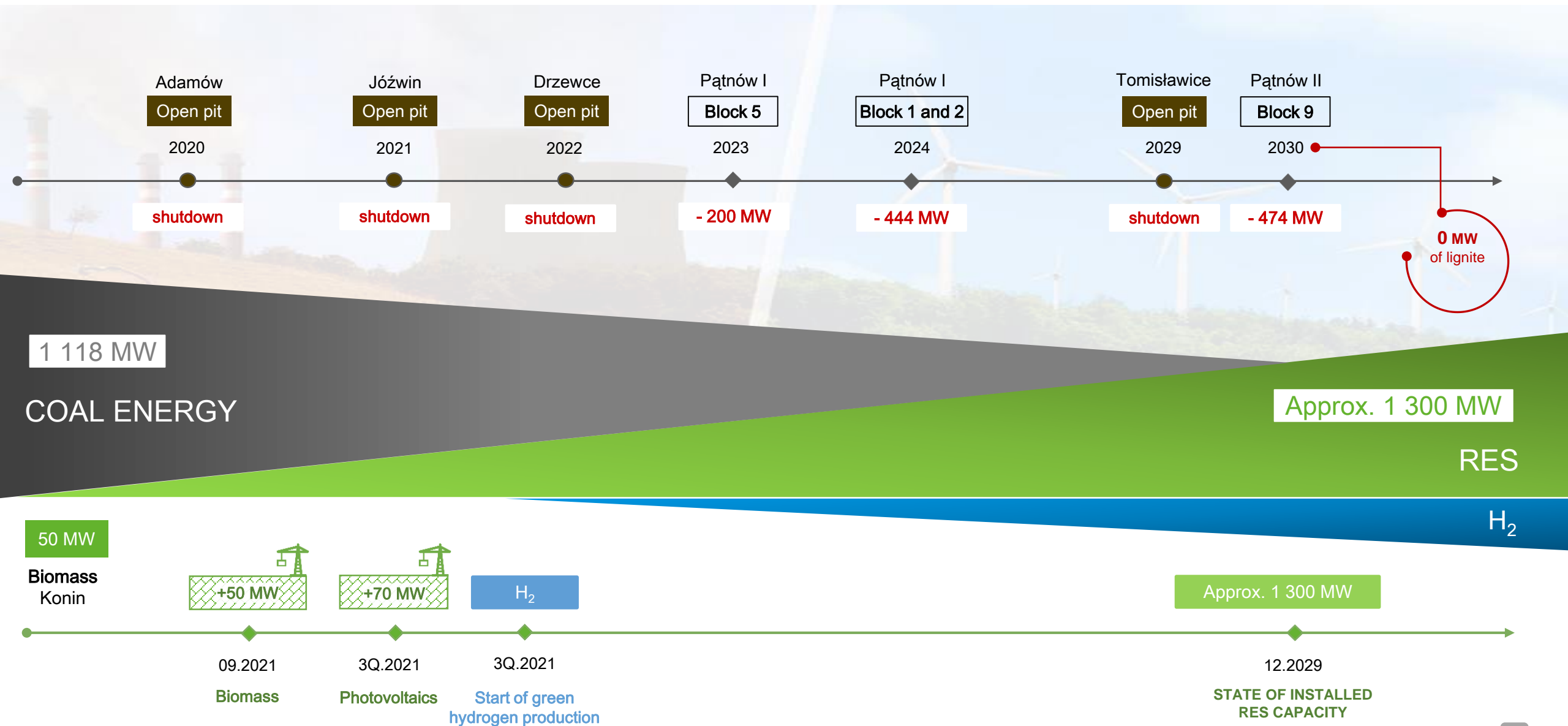
COAL



RES



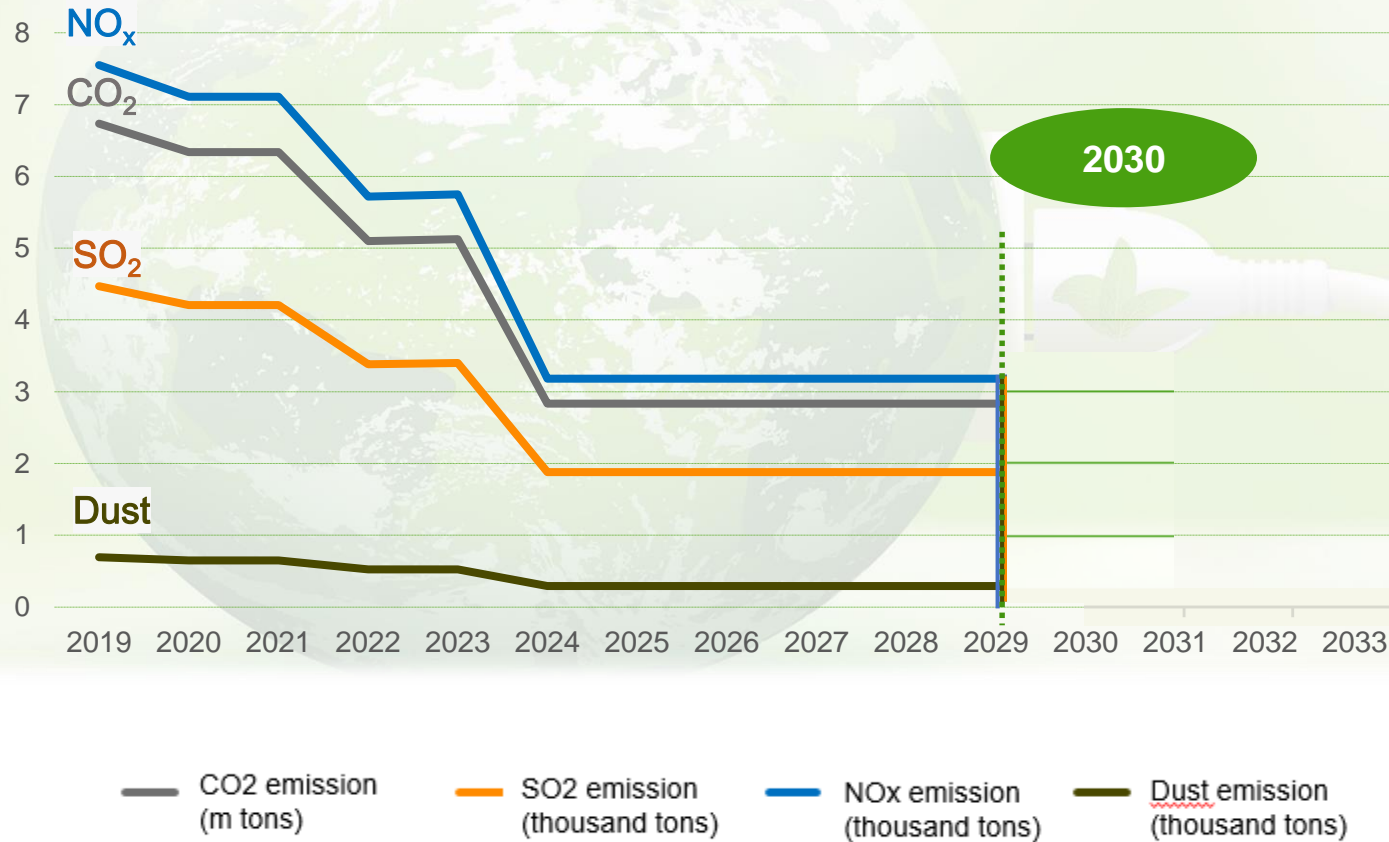
TRANSFORMATION TOWARDS CLEAN POLAND



EMISSION NEUTRALITY AFTER 2029



Total emission related to electricity production in ZE PAK



from 2030 r.

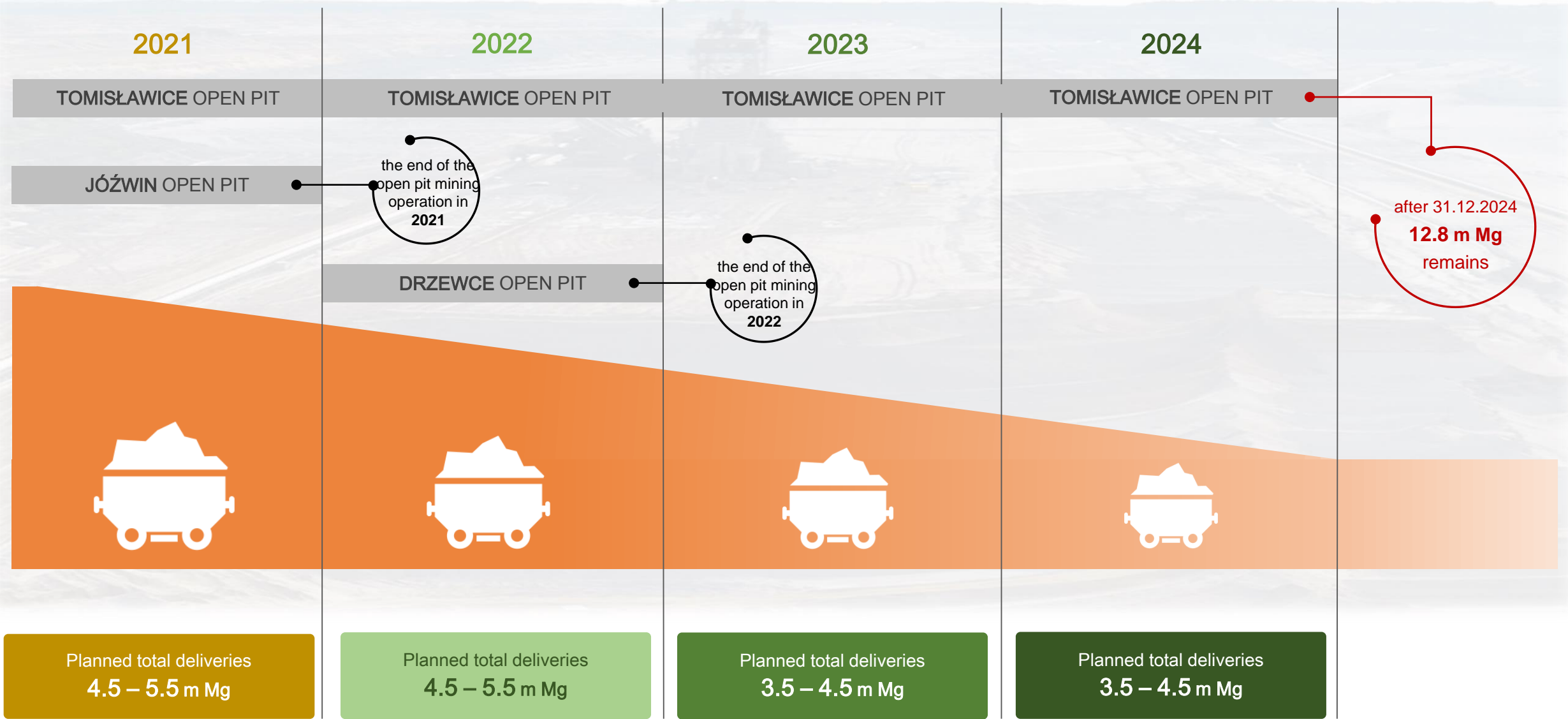
0 emission 

Related to
Electricity production

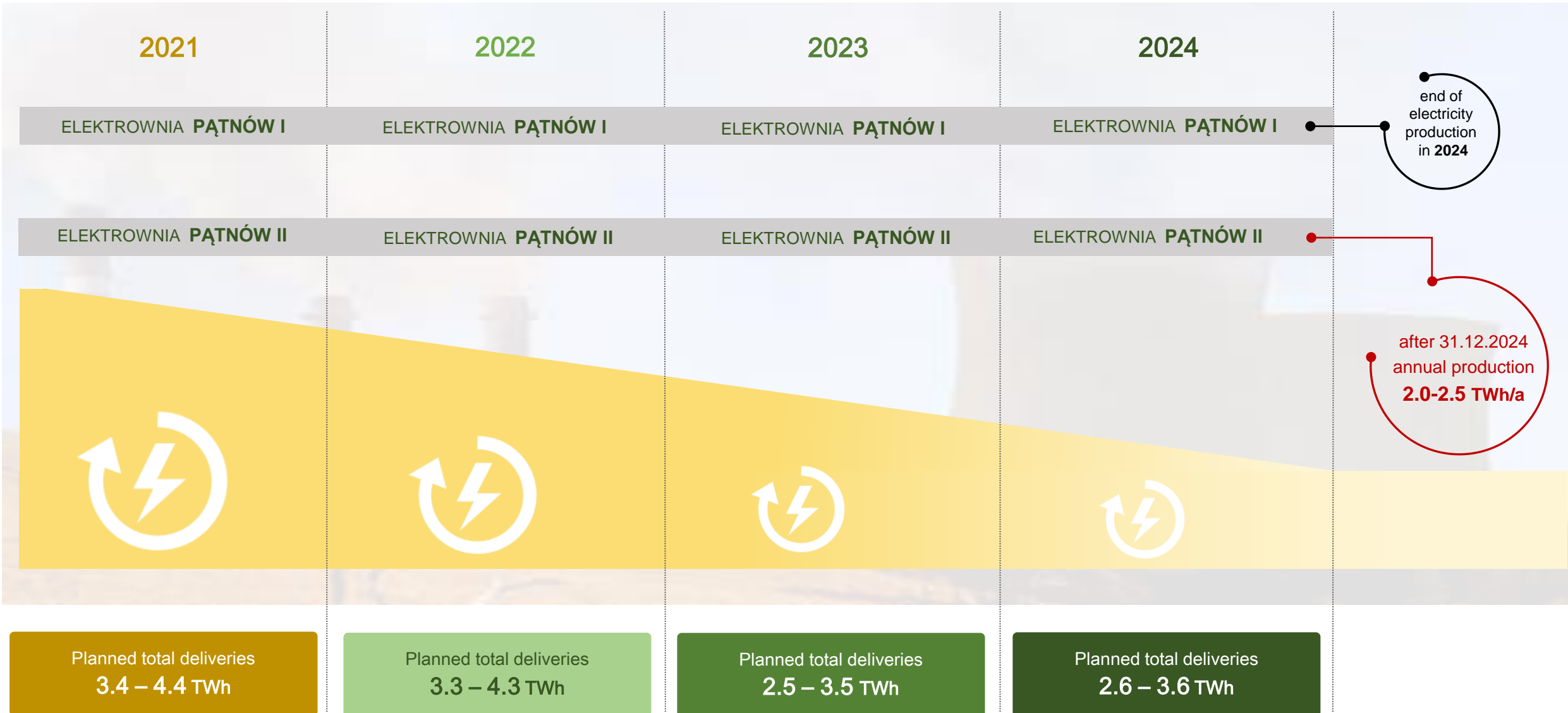
We are ahead of the
goal of European Union
climate neutrality (2050)

by 20 years

COAL MINING SEGMENT IN THE PERSPECTIVE OF 2024



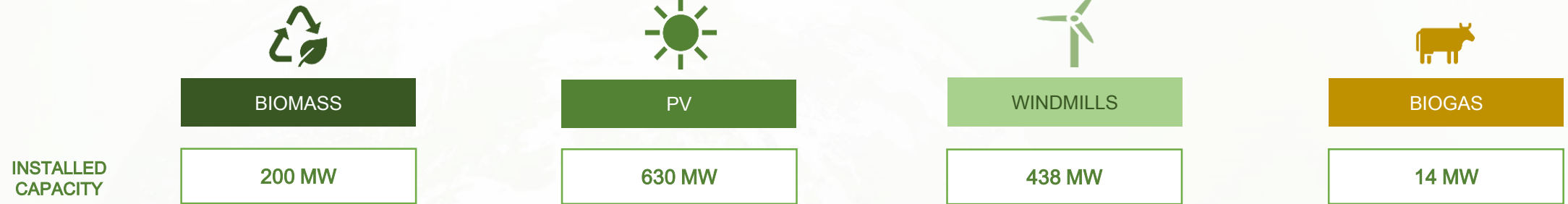
COAL ENERGY GENERATION SEGMENT IN THE PERSPECTIVE OF 2024



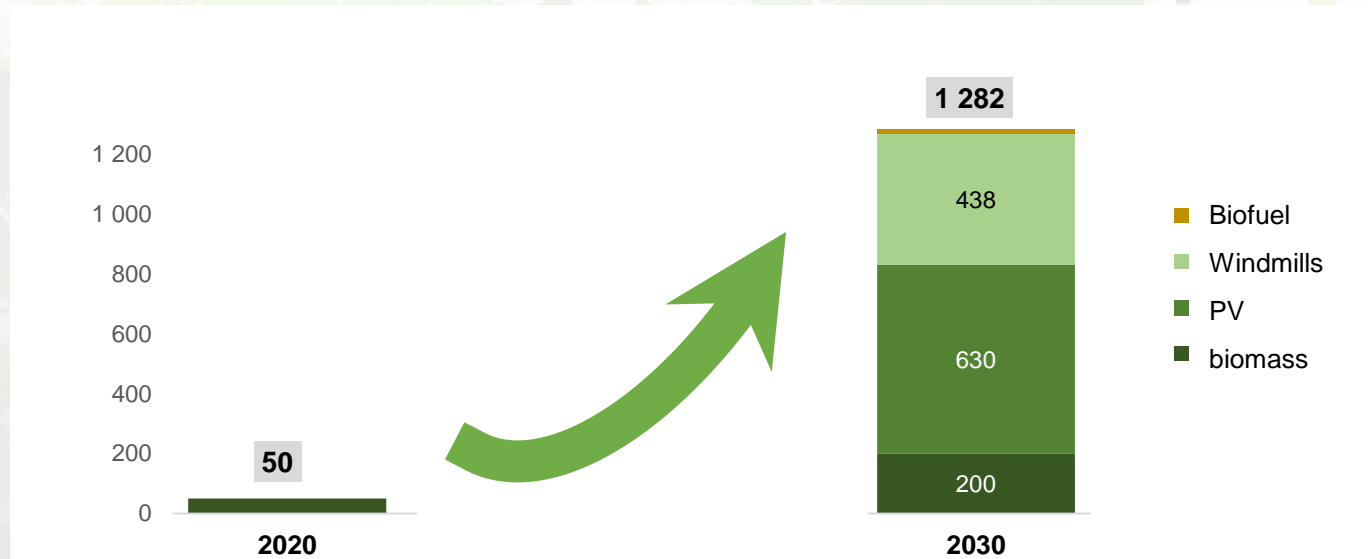
DEPENDENT STRUCTURE WITHIN ZE PAK CAPITAL GROUP



GREEN ENERGY DEVELOPMENT PLANS



Structure of INSTALLED CAPACITY acc. to RES type





Energia
dla Ciebie