



GOBIERNO
DE ESPAÑA

MINISTERIO
DE INDUSTRIA, COMERCIO
Y TURISMO

ICEX España
Exportación
e Inversiones

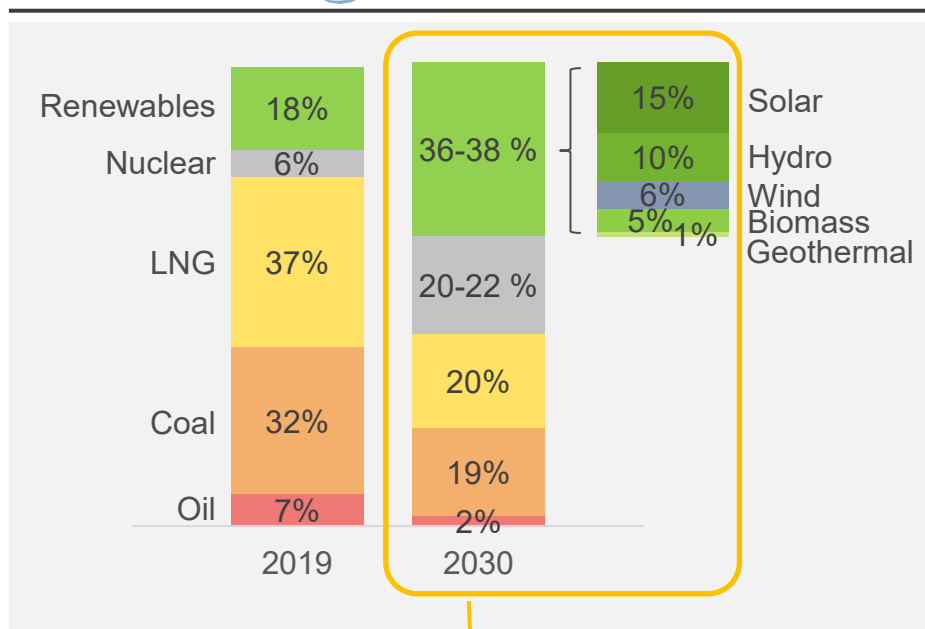
Offshore Wind Energy Conference in Japan II

Economic and Commercial Office
of the Embassy of Spain in Tokyo

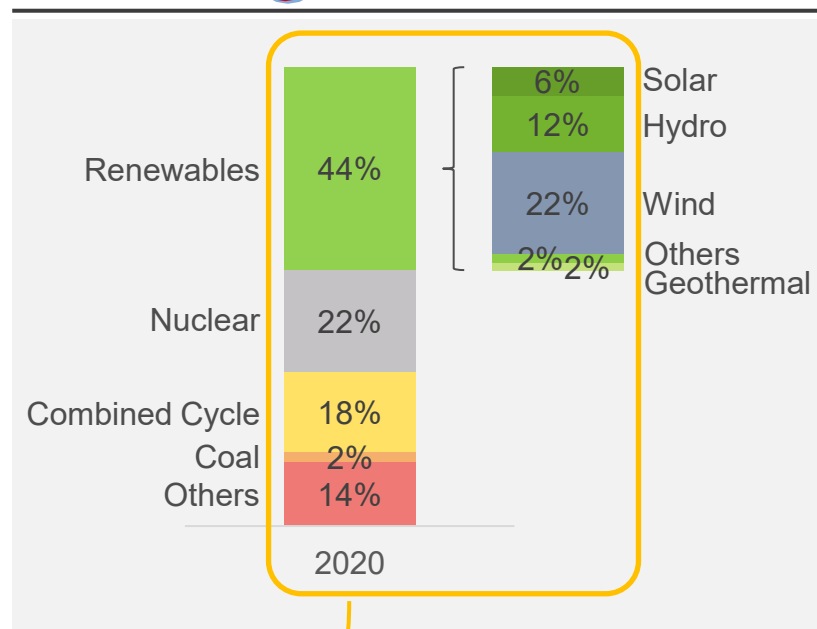
October, 2021

Power generation in Japan and Spain

In percentage (%)



Source: Ministry of Economy, Trade and Industry



Source: Red Eléctrica de España (REE)

Structure of the Spanish Electricity Market



Value chain



Physical flow



Economic flow



■ Liberalized activities ■ Regulated activities

Source: Structure elaborated by Energigreen

2ND

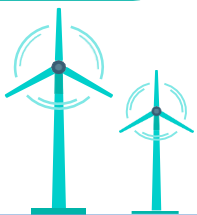
47 PROVINCES HAVE WIND ENERGY



20 PROVINCES ALREADY GENERATE MORE THAN 1 TWh THANKS TO THE WIND

COVERAGE AND POWER

COVERAGE OF DEMAND
21.9%

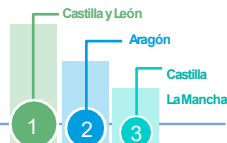


PRODUCTION WIND 2020
53,645 GWh

TOTAL INSTALLED CAPACITY
27,446 MW

NEW INSTALLED CAPACITY
1,720 MW

REGIONAL RANKING BY ACCUMULATED CAPACITY IN 2020



REGIONAL RANKING FOR NEW INSTALLED CAPACITY IN 2020



CONTRIBUTION TO GDP

4,073 M€
WIND SECTOR

0.35%
of Spanish GDP

ENVIRONMENT

HOW MANY CO₂ EMISSIONS DOES WIND POWER AVOID?

29 Mton



EXPORTS

2,062 M€

3RD

Largest exporter of wind turbines in the world (after Denmark and Germany)



INVESTMENT IN R&D

20 RESEARCH CENTERS

9 UNIVERSITIES
With activities in the wind sector

6th position in the world
APPLICATION FOR WIND POWER PATENTS IN SPAIN

3rd position in the EU

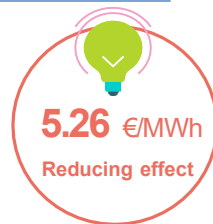
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NUMBER OF PATENTS IN SPAIN IN THE LAST 10 YEARS

SAVINGS

1,292 M€

REDUCTION IN WHOLESALE MARKET PRICE



EMPLOYMENT

30,000
PEOPLE work in the wind sector in Spain



By 2030, the wind sector will employ 60,000 people

World Data

WIND POWER INSTALLED IN THE WORLD

743 GW

NEW POWER INSTALLED IN 2020

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Ranking of countries by accumulated installed power



European Data

220 GW
Installed capacity in Europe



25 GW
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14.7 GW
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Ranking of countries by new power 2020



WIND INDUSTRY

21,419

WIND GENERATORS IN SPAIN

1,265

WIND FARMS IN 1,037 MUNICIPALITIES

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INDUSTRIAL CENTERS IN 16 OF THE 17 Autonomous Communities

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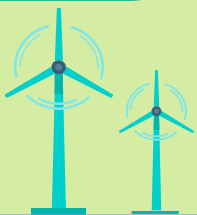
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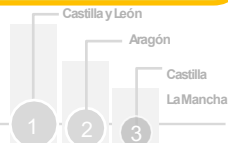
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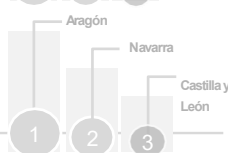
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Reducing effect



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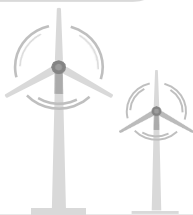
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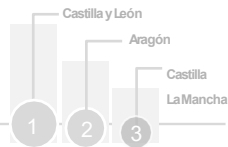


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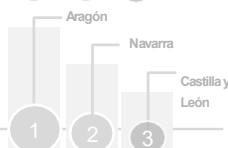
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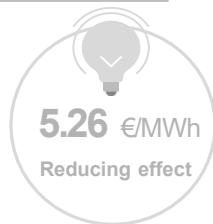
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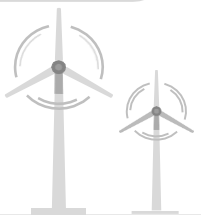
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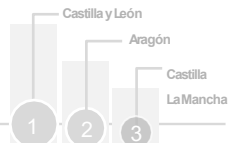


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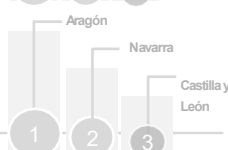
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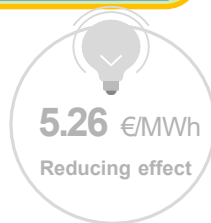
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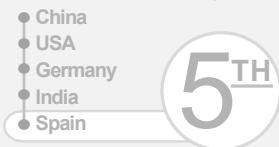


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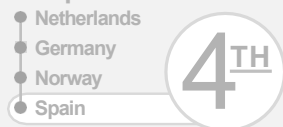
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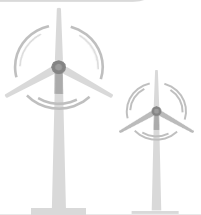
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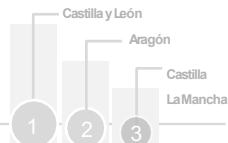


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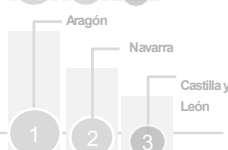
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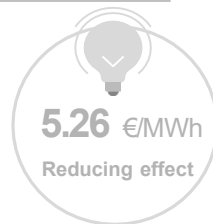
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