

**The OMI Group in the EU
electricity spot and
forward market**
16/09/2019





1. OMI - MAIN FEATURES

2. ENERGY UNION AND TRANSITION IN THE EU: THE IBERIAN EXPERIENCE

2.1 EU ENERGY POLICY TOWARDS DECARBONIZATION

2.2 REGULATORY FRAMEWORK IN AN EUROPEAN CONTEXT

3. THE EU ELECTRICITY SPOT AND FORWARD MARKET



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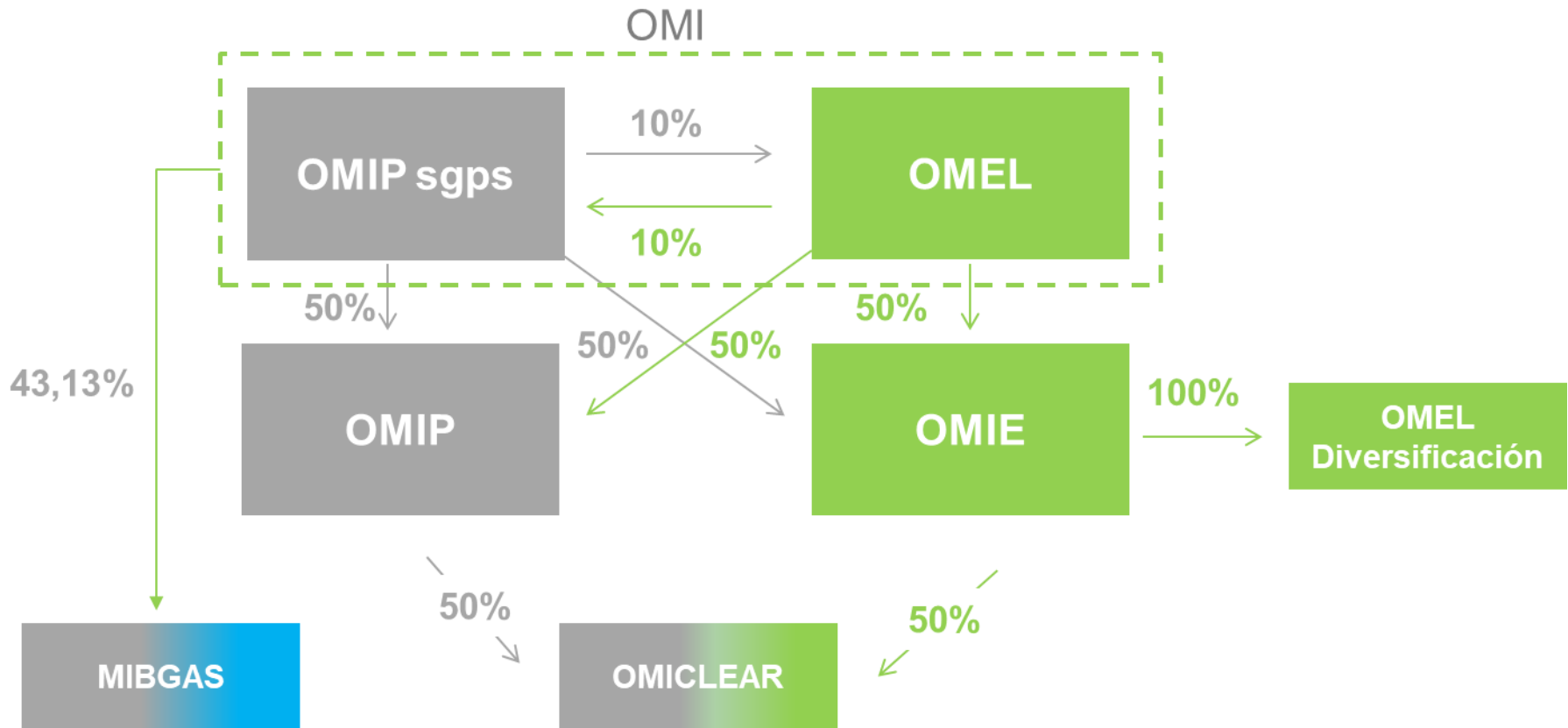
REGULATORY FRAMEWORK IN AN EUROPEAN CONTEXT

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THE EU ELECTRICITY SPOT AND FORWARD MARKET



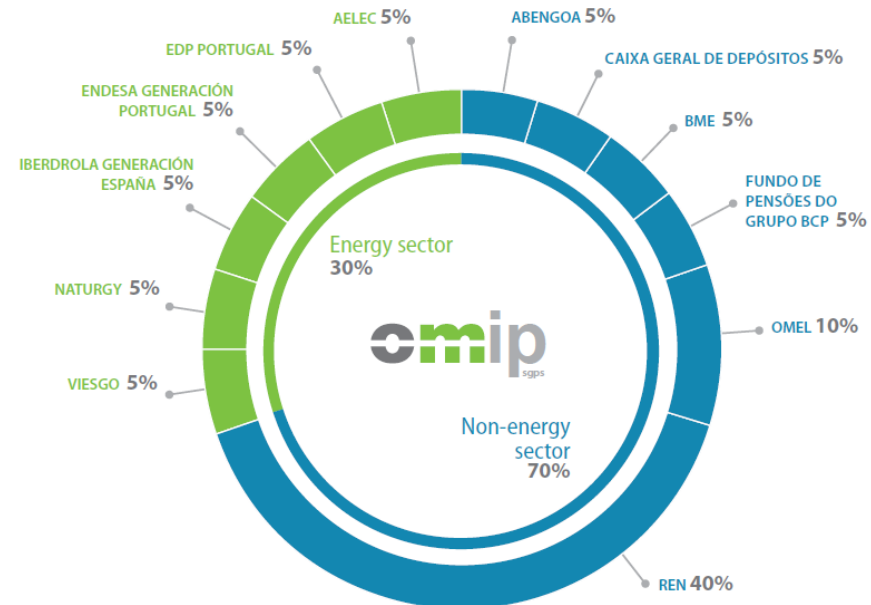
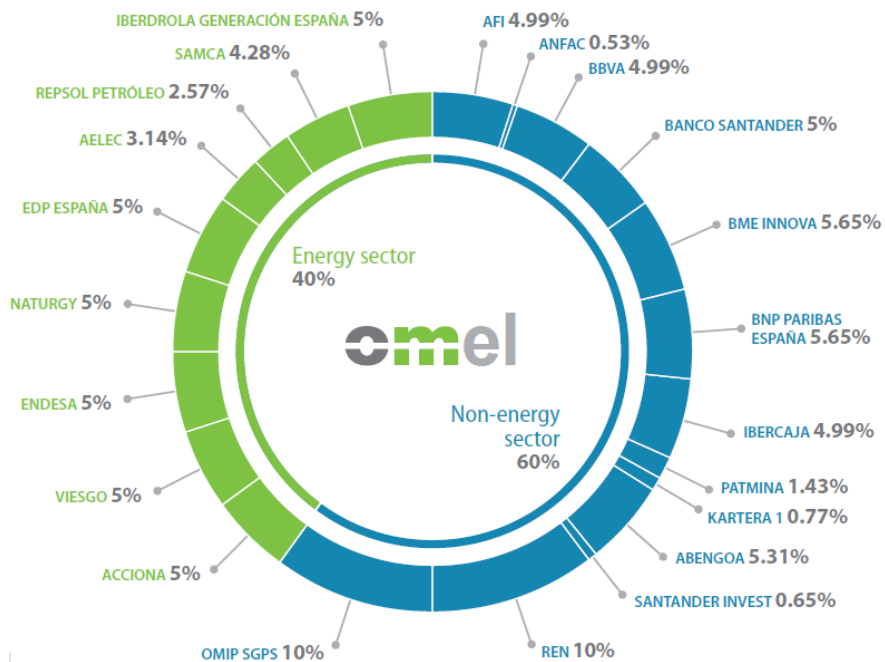
STRUCTURE OF OMI GROUP





OMI SHAREHOLDERS

- Stocks limited to 5% (Exception of TSOs that can hold up to 10% of capital)
- Shares held by companies involved in the electricity sector cannot exceed 40% all together
- Open to new shareholders





OMI GROUP – MAIN FIGURES

- OMIE is the Nominated Electricity Market Operator (NEMO) for the Iberian Peninsula and manages the day and intraday electricity markets in Spain and Portugal.
- OMIP sgmr manages the Electric Energy Derivatives Market since July 2006 and offers continuous trading services for different derivatives products, bilateral trades registration and data distribution services.
- OMIClear, Central Counterparty Clearing House, commenced its operations in July 2006, and was re-authorised to provide services as a Central Counterparty in October 2014 under the European Market Infrastructure Regulation (EMIR).



OMI GROUP – MAIN FIGURES 2018

IBERIAN MARKET

30 M consumers

ANNUAL CONSUMPTION

332 TWh

% OF EUROPEAN CONSUMPTION

10%

MIBEL ORGANIZED MARKET

Spot market

Day-ahead +
Intraday

emie

Economic volume: 16,150 M€

Traded energy volume: 276 TWh DA 237
ID 39

Transactions: 18 M

Agents: 1,156

% demand of MIBEL: 83%

Forward market

emip

Traded energy volume: 30 TWh

Agents: 67

emiclear

Energy settled: 32.8 TWh

Settled economic volume: 1,466 M€

Agents: 13 clearing 65 registration 22 settlement



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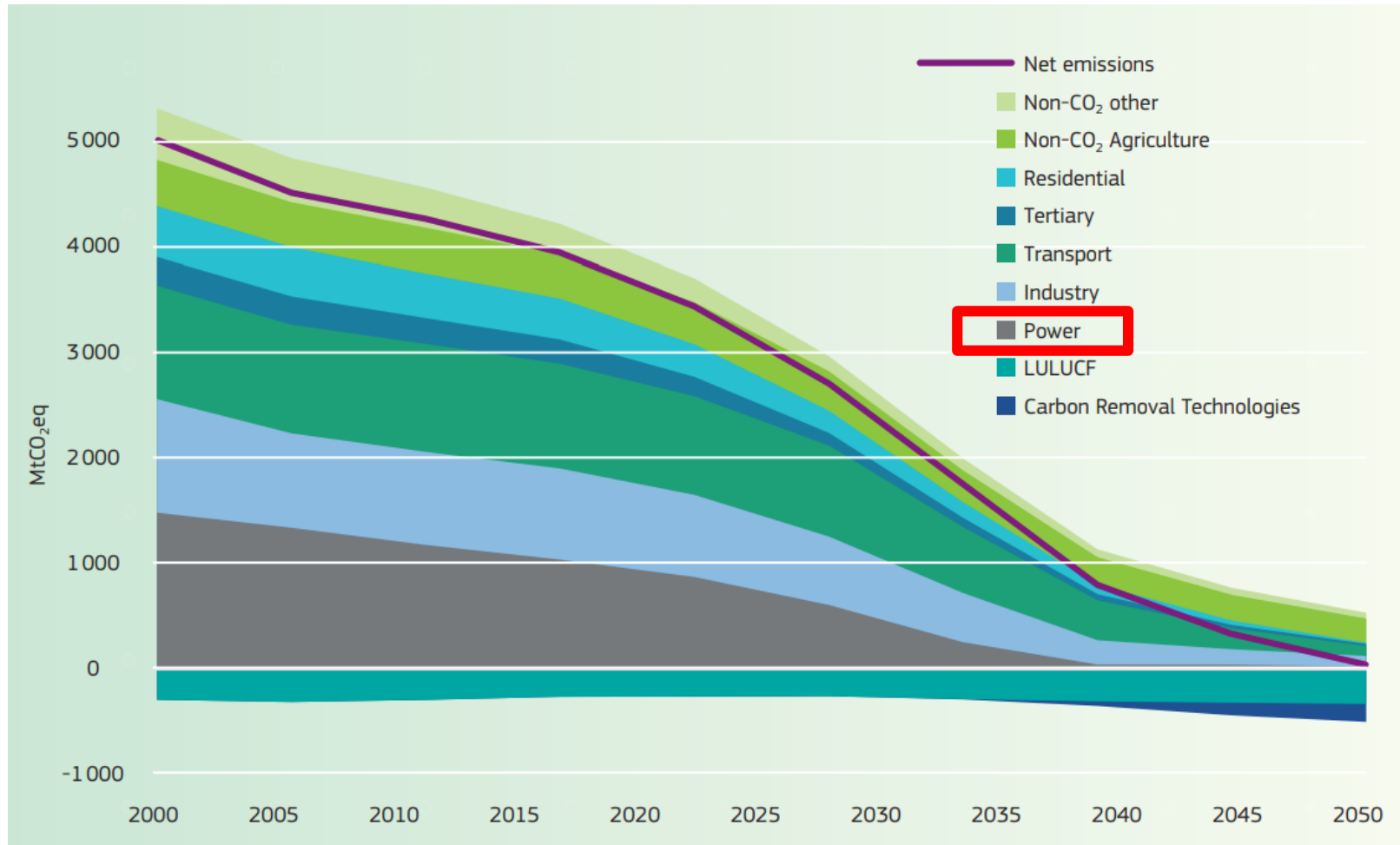
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CLIMATE ACTION: AN CHANCE FOR EVERYONE



Trajectory of GHG emissions in 1.5 ° C scenario



Source: A Clean Planet for all - A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy

CLIMATE ACTION: AN CHANCE FOR EVERYONE



POLÍTICA EU

Framework and binding objectives established
at international level for
next years



40% CO₂

32% RES

32,5% EE

2030





CLEAN ENERGY FOR ALL EUROPEANS PACKAGE

	European Commission Proposal	EU Inter-institutional Negotiations	European Parliament Adoption	Council Adoption	Official Journal Publication
Energy Performance in Buildings	30/11/2016	Political Agreement	17/04/2018	14/05/2018	19/06/2018 - Directive (EU) 2018/844
Renewable Energy	30/11/2016	Political Agreement	13/11/2018	04/12/2008	21/12/2018 - Directive (EU) 2018/2001
Energy Efficiency	30/11/2016	Political Agreement	13/11/2018	04/12/2018	21/12/2018 - Directive (EU) 2018/2002
Governance of the Energy Union	30/11/2016	Political Agreement	13/11/2018	04/12/2018	21/12/2018 - Regulation (EU) 2018/1999
Electricity Regulation	30/11/2016	Political Agreement	26/03/2019	22/05/2019	14/06/2019 - Regulation (EU) 2019/943
Electricity Directive	30/11/2016	Political Agreement	26/03/2019	22/05/2019	14/06/2019 - Directive (EU) 2019/944
Risk Preparedness	30/11/2016	Political Agreement	26/03/2019	22/05/2019	14/06/2019 - Regulation (EU) 2019/941
ACER	30/11/2016	Political Agreement	26/03/2019	22/05/2019	14/06/2019 - Regulation (EU) 2019/942

PNIEC 2021-2030



IN THE PAST WE DID NOT HAVE A POINT OF ARRIVAL

PLANES NACIONALES INTEGRADOS DE ENERGÍA Y CLIMA

ESPAÑA

Objetivos Plan Nacional Integrado de Energía y Clima (PNIEC ESPAÑA)

21%

reducción de emisiones de efecto invernadero respecto a 1990

38%

de reducción de emisiones respecto a niveles actuales

42%

de renovables en uso final de energía



39,6%

de mejora de eficiencia energética

74%

de renovables en generación eléctrica

2050

neutralidad de carbono, reducción 90% de emisiones. Sistema eléctrico 100% renovable

PORTUGAL

Objetivos Plan Nacional Integrado de Energía y Clima (PNIEC PORTUGAL)

27%

reducción de emisiones de efecto invernadero respecto a 1990

38%

de reducción de emisiones respecto a niveles actuales

47%

de renovables en uso final de energía



32,5%

de mejora de eficiencia energética

80%

de renovables en generación eléctrica

2050

neutralidad de carbono, reducción del 85% al 90% de emisiones. Sistema eléctrico 100% renovable.

... NOW WE HAVE ONE



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EU ELECTRICITY SECTOR

Liberalised activities

GENERATION

Freedom of electricity generating companies to establish

COMMERCIALIZATION

Freedom to switch supplier

Regulated activities

TRANSMISSION

DISTRIBUTION

Remuneration set by the Administration

Third-Party Access to the Network



KEY ELEMENTS

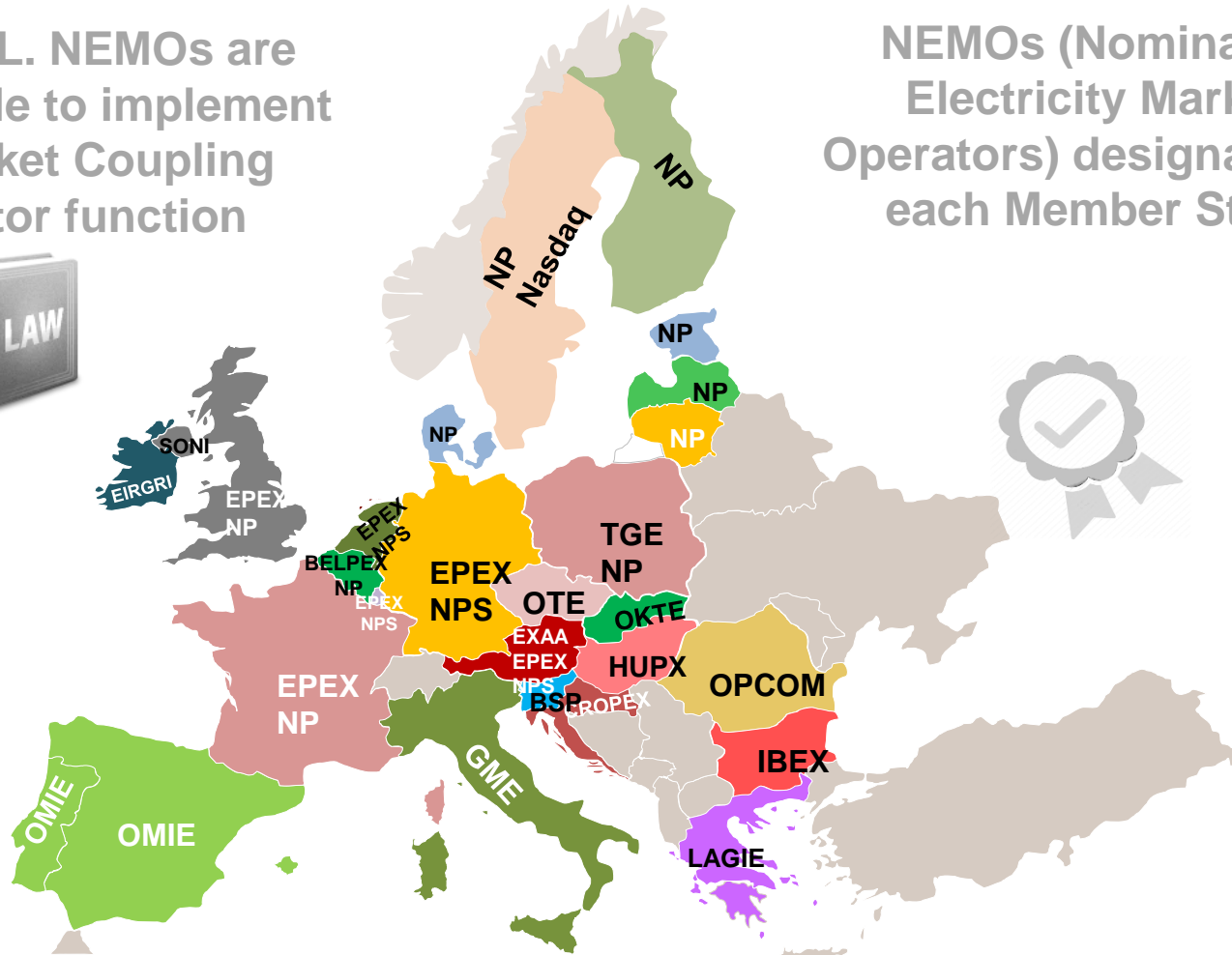
- ⦿ European Network of TSOs for gas and for electricity
- ⦿ NEMOs as a new EU entity to perform the MCO function
- ⦿ Network Codes & Guidelines
- ⦿ Reinforcement of the Agency for the Cooperation of Energy Regulators - ACER
- ⦿ Reinforced role for NRAs and independence provisions
- ⦿ Transparency and consumer protection measures



NEMO DESIGNATION

CACM GL. NEMOs are responsible to implement the Market Coupling Operator function

NEMOs (Nominated Electricity Market Operators) designated in each Member State

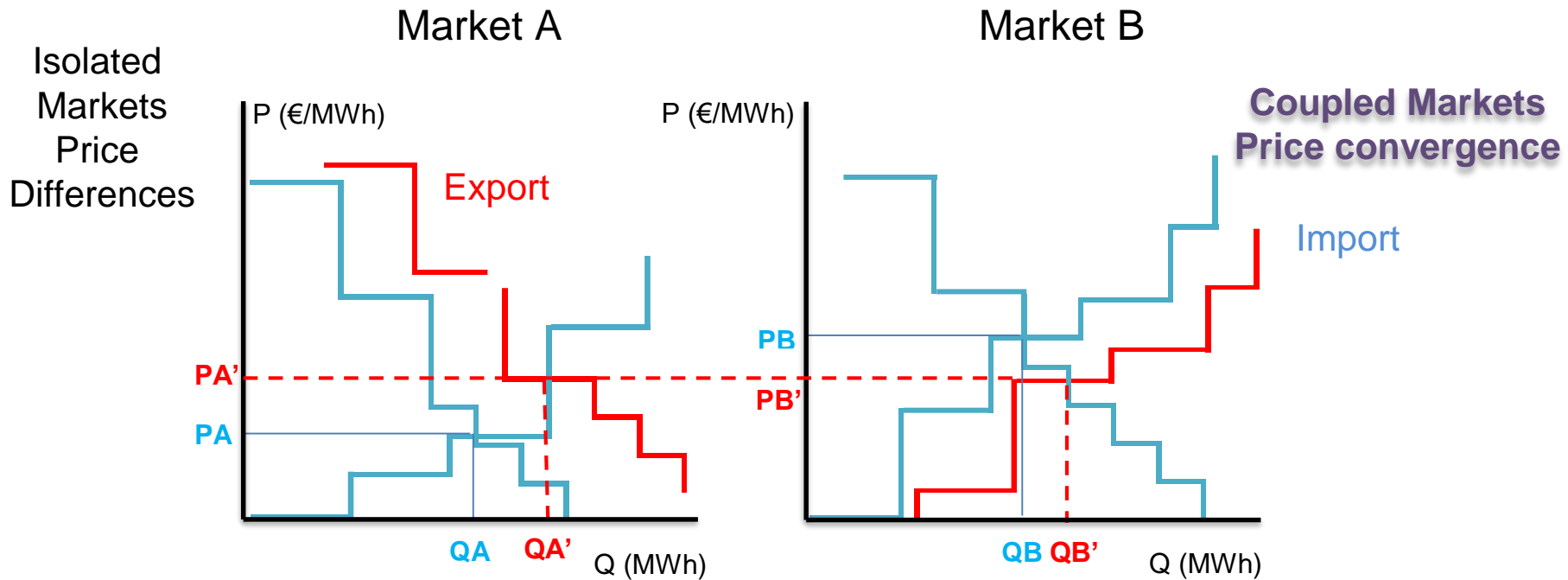


NEMOs interact to develop the market coupling operator function



EUROPEAN MODEL FOR DAY-AHEAD MARKETS

- **For Power Exchanges: Most competitive price will arise & Overall welfare increases**



- **For TSOs: Efficient capacity allocation**



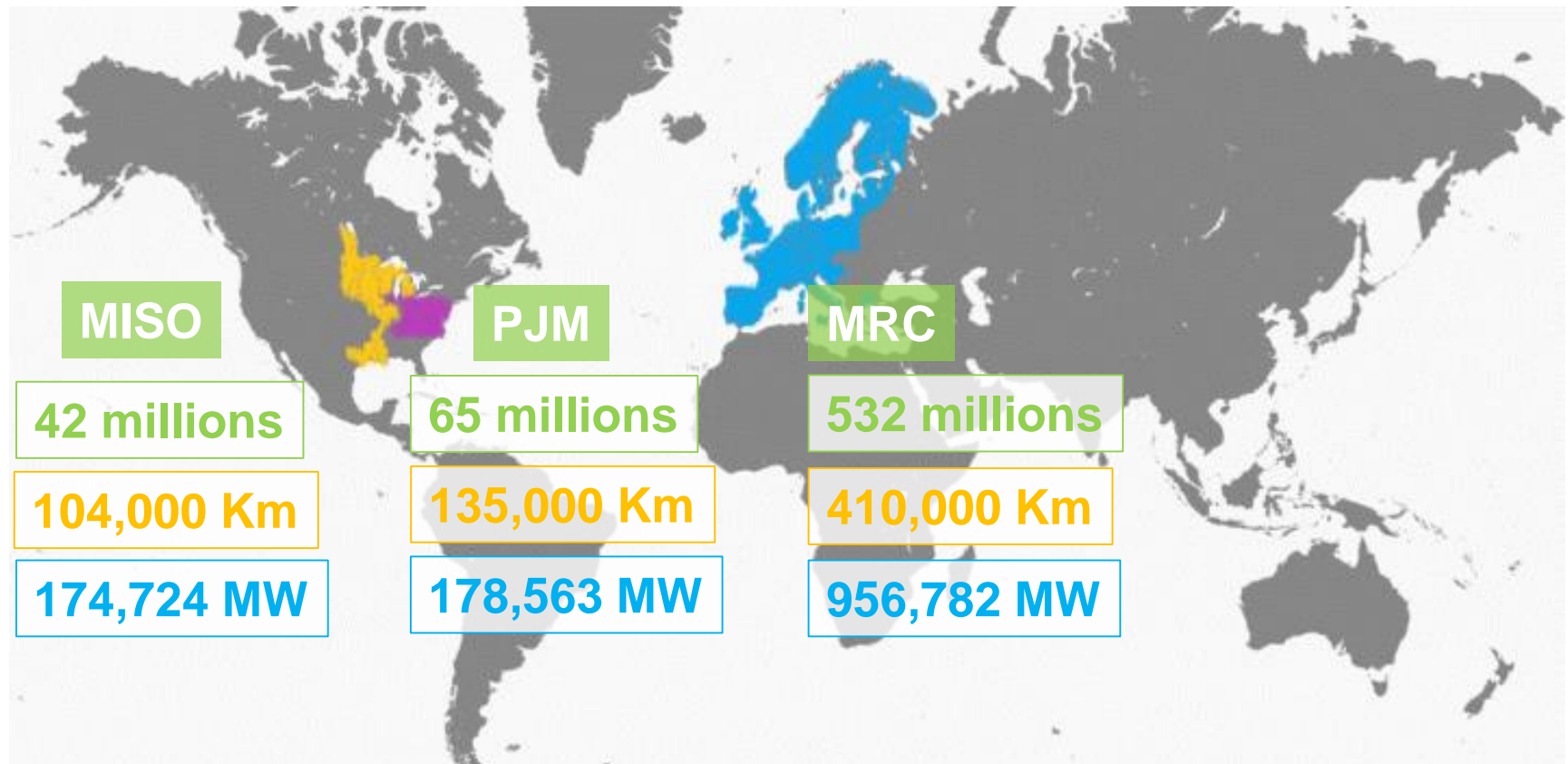
EXISTING TSOs & NEMOs COOPERATION

MRC Comparison MRC, PJM, MISO

CUSTOMERS SERVED

KMS LINES OPERATED

GENERATION CAPACITY





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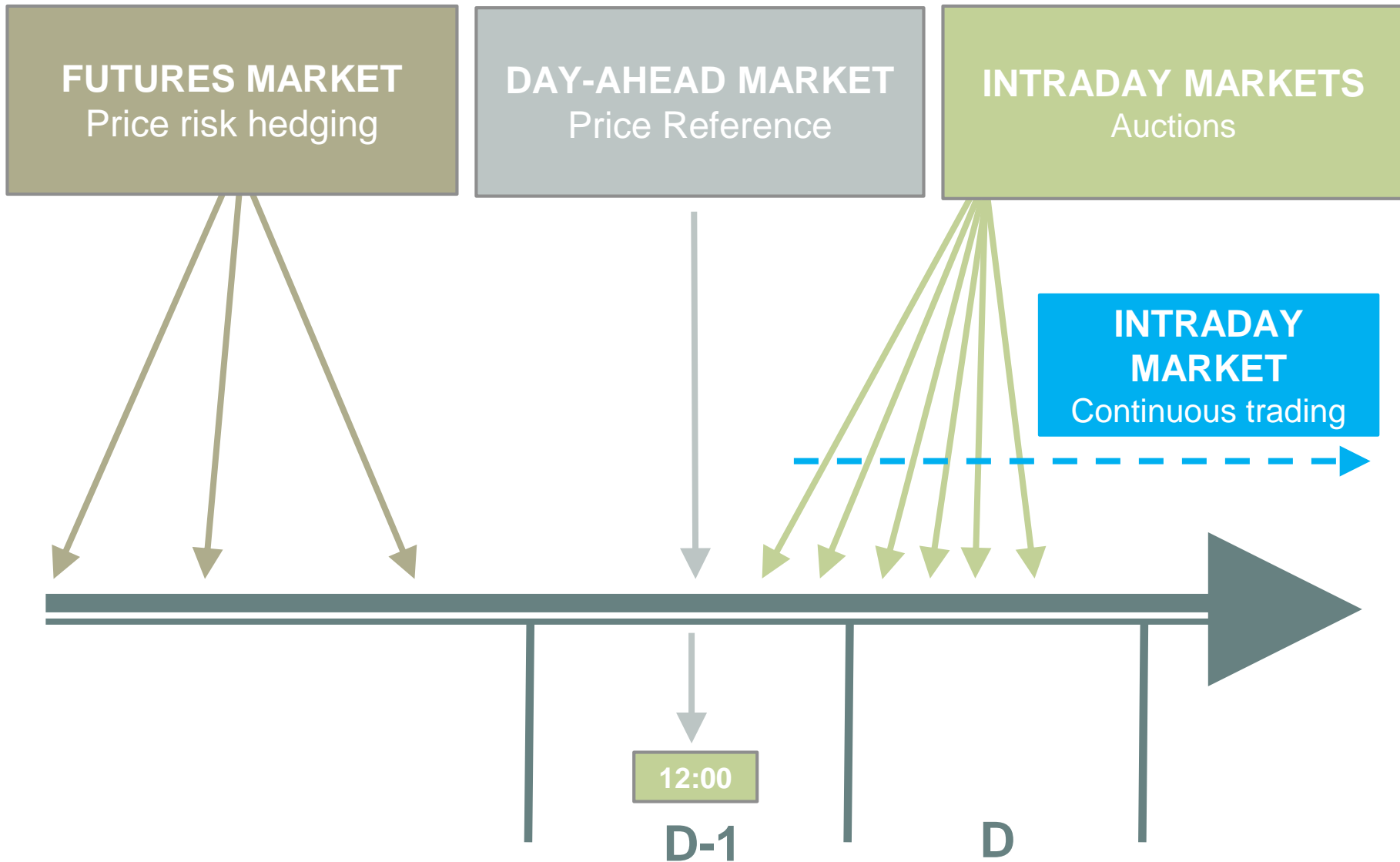
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MARKETS INTEGRATION HELPS DELIVER ENERGY TRANSITION





MARKETS INTEGRATION HELPS DELIVER ENERGY TRANSITION

THE LARGEST MARKET INTEGRATION IN THE WORLD



UE Day Ahead

22 Countries

12 NEMOs

32 TSOs

1 Algorithm

85% Demand



- Coupled Markets DA
- Associated Markets not coupled yet to DA
- Independent user of PCR algorithm
- Next countries to Couple

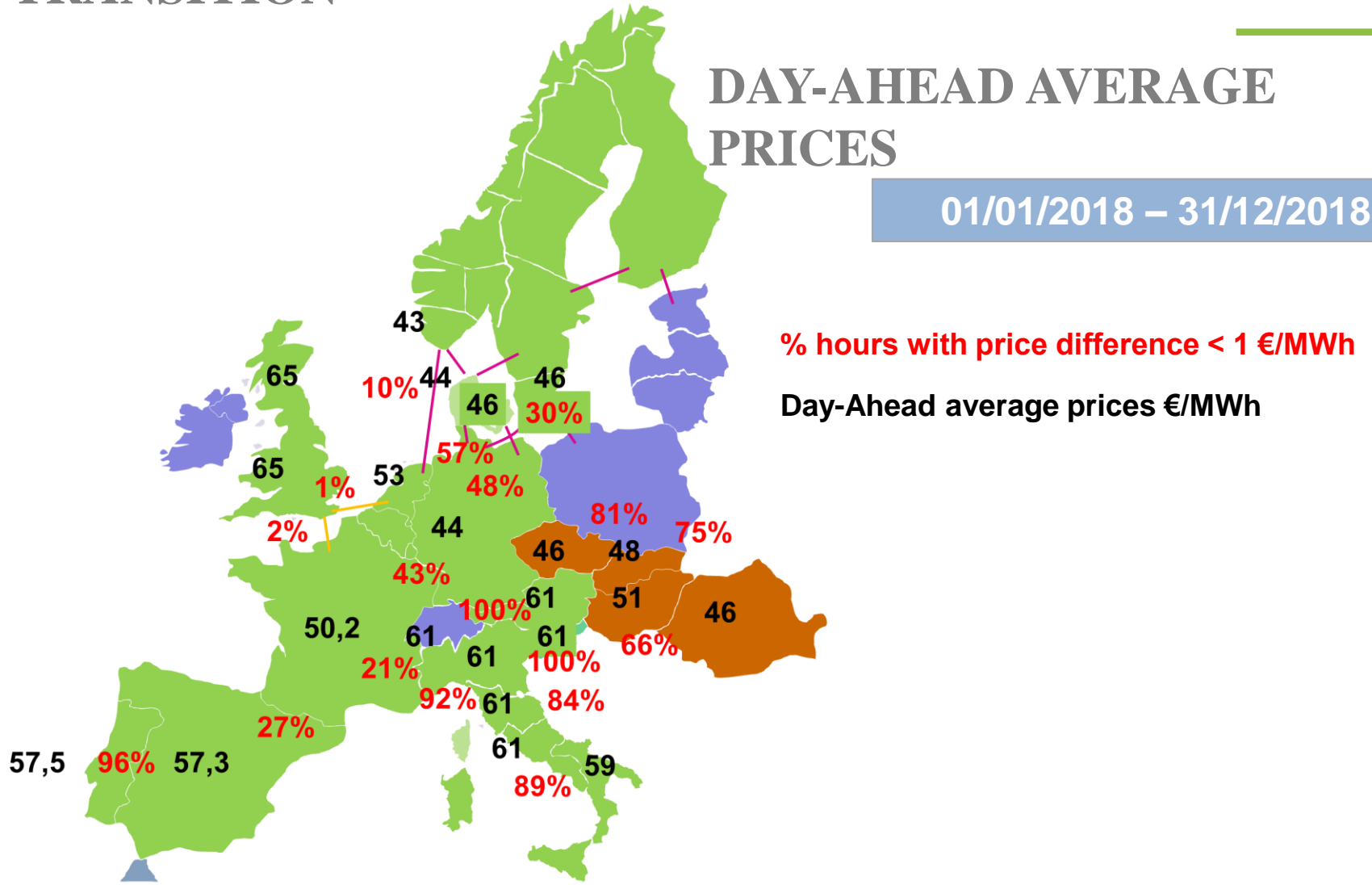
Source: MRC, 2018



MARKETS INTEGRATION HELPS DELIVER ENERGY TRANSITION

DAY-AHEAD AVERAGE PRICES

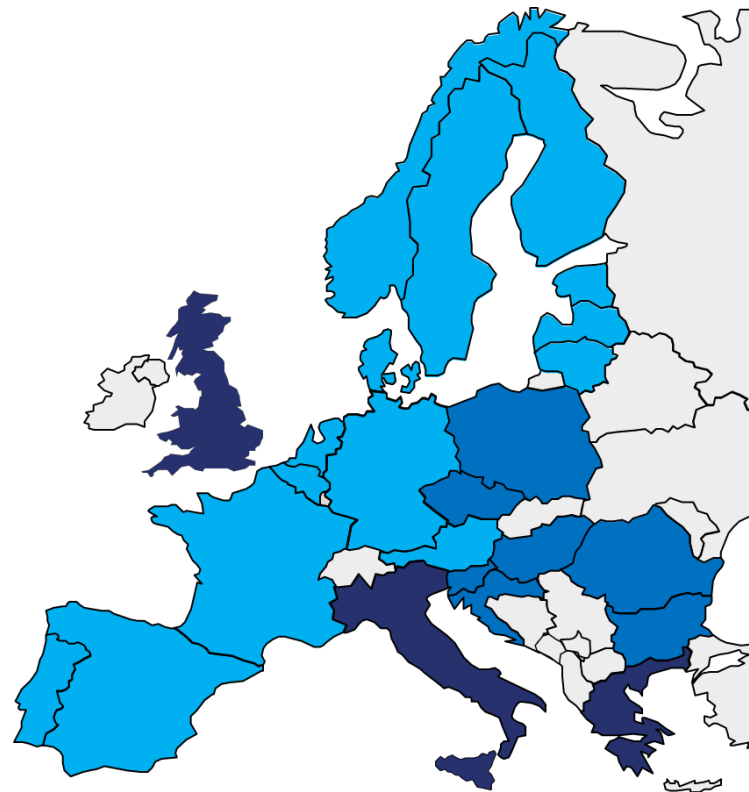
01/01/2018 – 31/12/2018





MARKETS INTEGRATION HELPS DELIVER ENERGY TRANSITION

THE LARGEST MARKET INTEGRATION IN THE WORLD



- 1st wave – Go-live
12/13 June 2018
- 2nd wave – Go-live
Q4 2019
- 3rd wave – Go-live
TBC



UE Intraday
14 Countries
4 NEMOs
16 TSOs
1 Algorithm

CONTINUOUS INTRADAY MARKET MAIN FIGURES IN 2018

1st

year Operation SIDC

99.8%

availability

21

countries will be
coupled by 2020

46

parties working
together PXs &
TSOs

15

million trades since
go-live

SIDC



 Coupled in June 2018

 2020

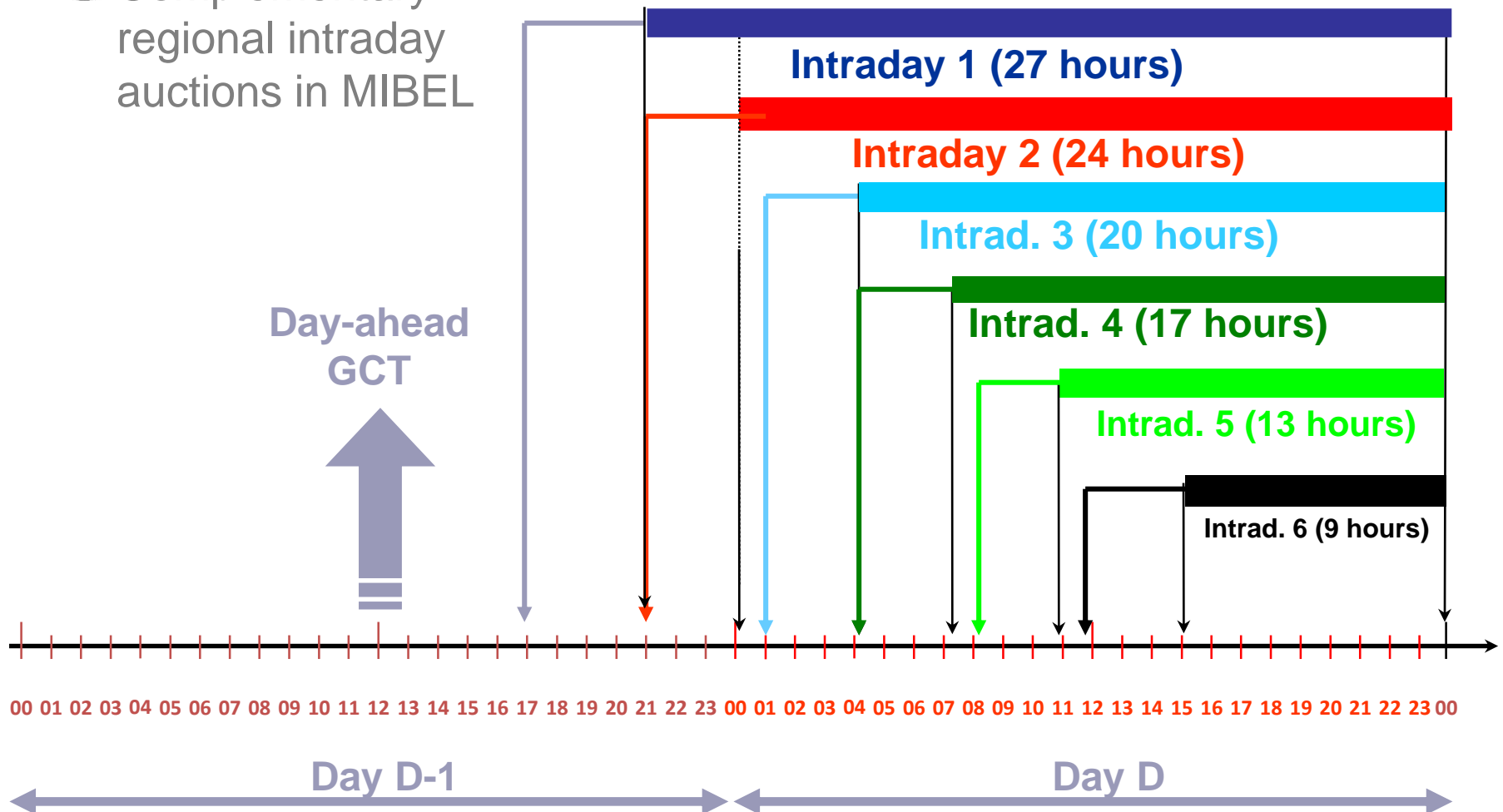
 Q4 2019



FUNCTIONING OF INTRADAY MARKET IN THE EU (XBID) AND INTRADAY AUCTIONS IN MIBEL

Complementary regional intraday auctions in MIBEL

Delivery period for each session





RISK HEDGING: FORWARD MARKETS NEGOTIATION PLATFORM AND CLEARING HOUSE

MIB GAS
DERIVATIVES

emip

Forward energy
markets



emiclear

Clearing house

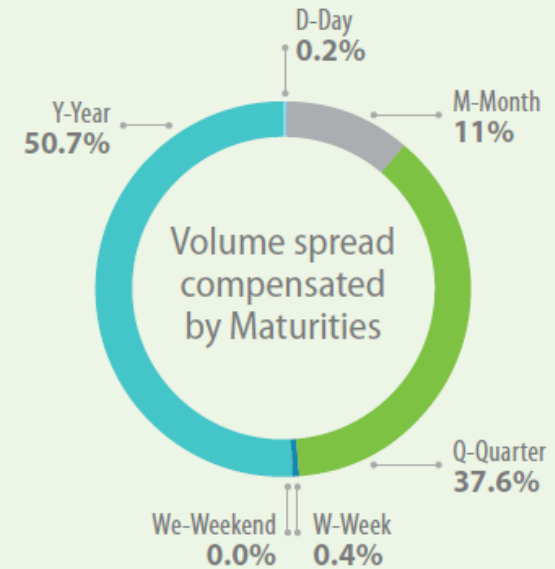
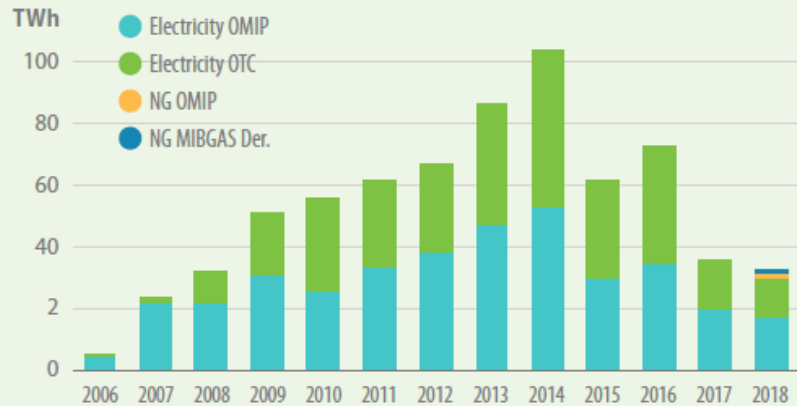
- ⊕ Negotiation (continuous /auction)
- ⊕ OTC register (with or without broker)

- ⊕ Position register
- ⊕ Risk assessment
- ⊕ Guarantees management
- ⊕ Settlement and billing
- ⊕ Notifications

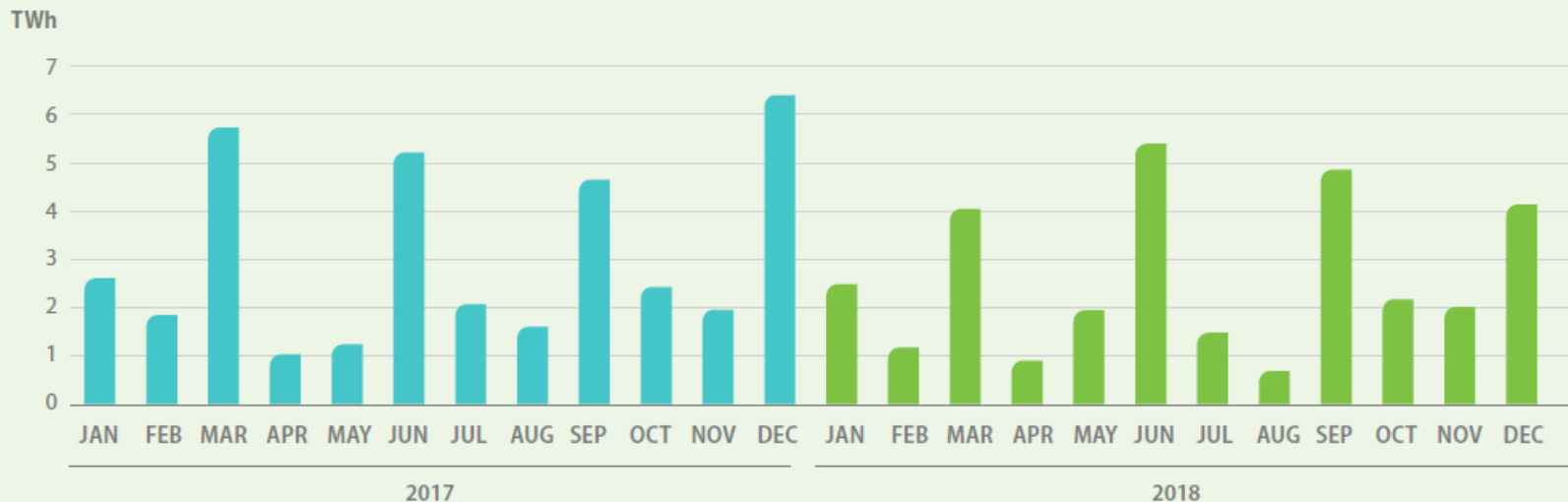


OMIP / OMICLEAR AT A GLANCE

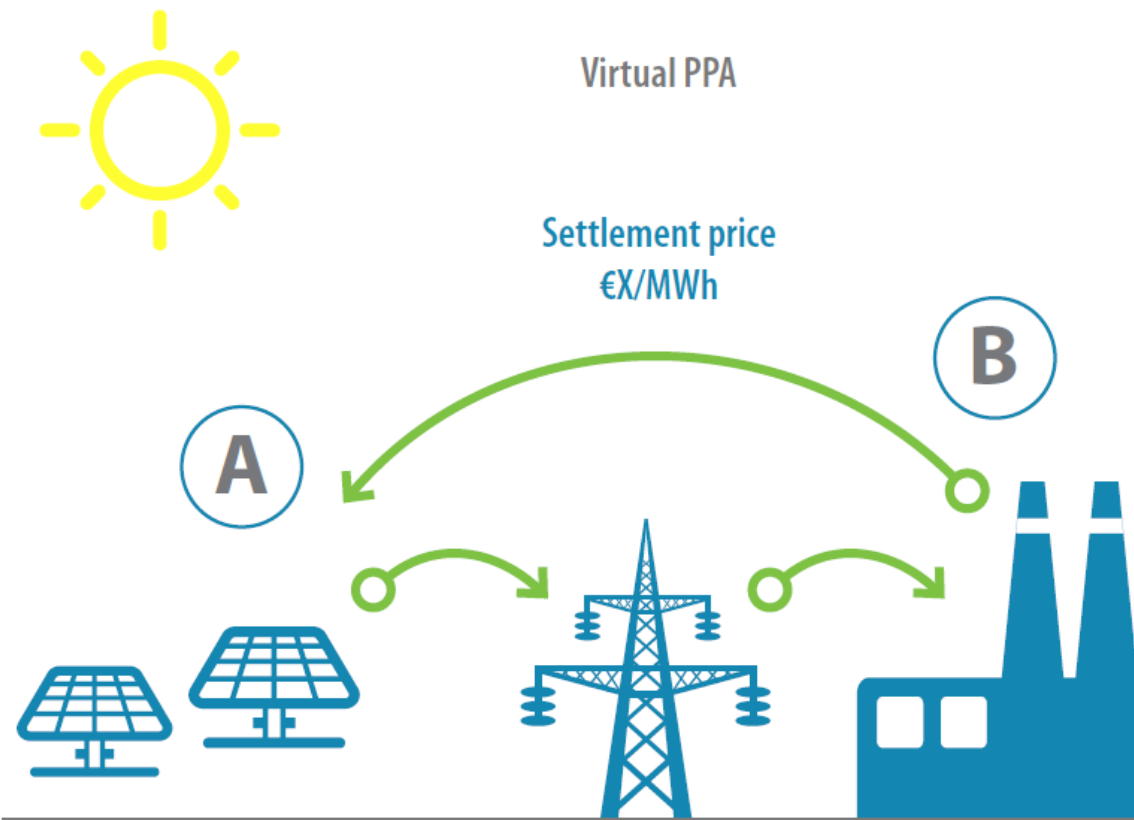
ANNUAL VOLUME COMPENSATED BY OMICLEAR (TWh)



MONTHLY ENERGY VOLUME (ELECTRICITY) REGISTERED WITH OMICLEAR (TWh)



HOW TO REGISTER A VIRTUAL PPA WITH OMIP/OMICLEAR



Reduction in the risk price

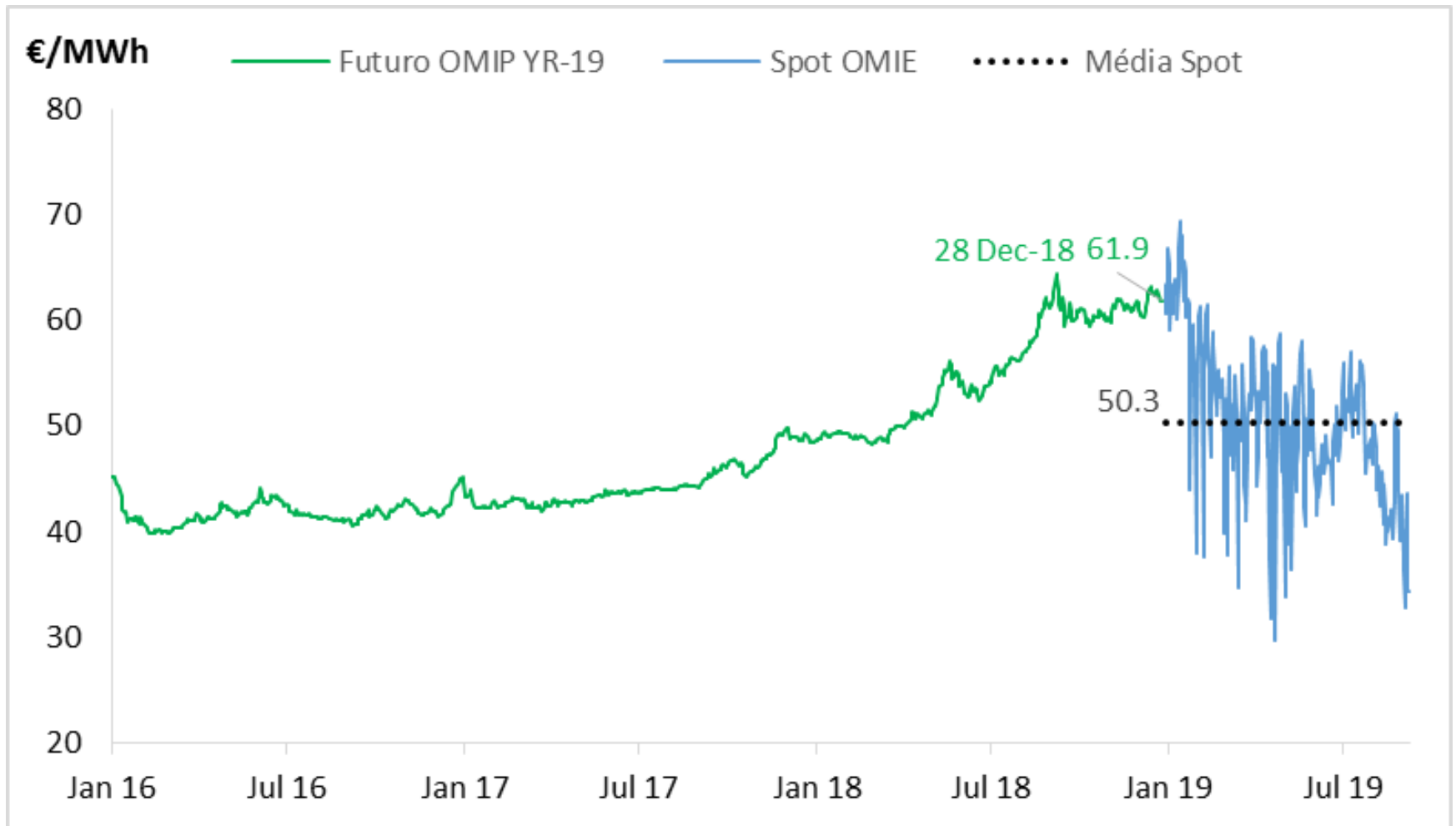
- Agent A and Agent B (participants in OMIP) can register a futures strip up until year +7, at a certain price (Settlement Price)
- Contracts are automatically cleared in OMIClear

Reduction in the counterparty risk

- Sellers guarantee a stable cash flow
- Buyers guarantee the purchase price



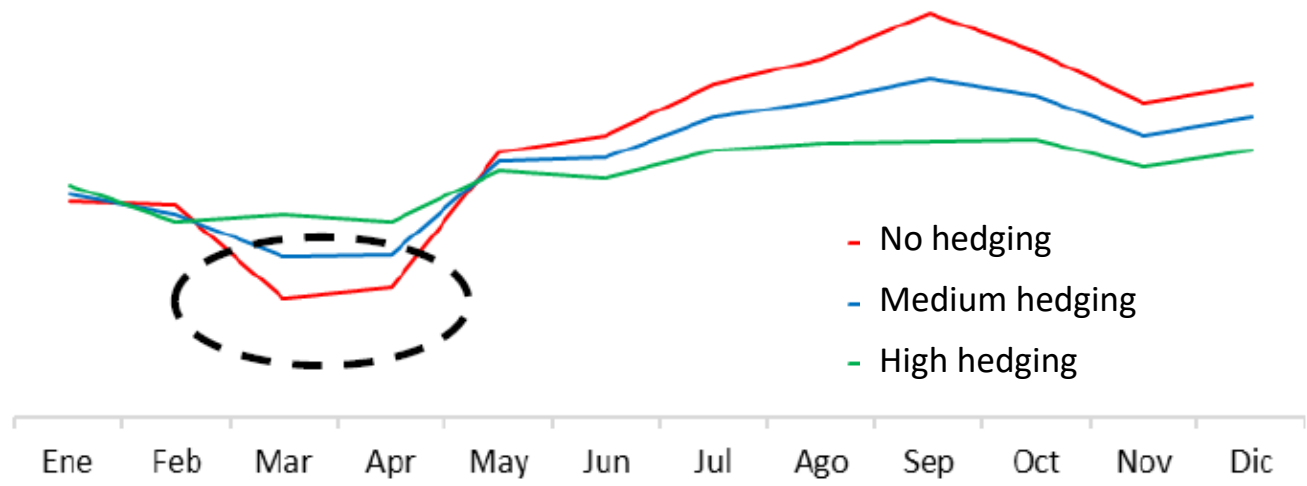
SPOT PRICE AND FUTURES PRICE





SPOT PRICE AND FUTURES PRICE EXAMPLE

Cash flows



Participation in forward markets (hedging) facilitates the modification of cash flows reducing volatility in the relevant periods.

Hedging with futures reduces the occurrence of extreme prices/cash flows.

THANK YOU

