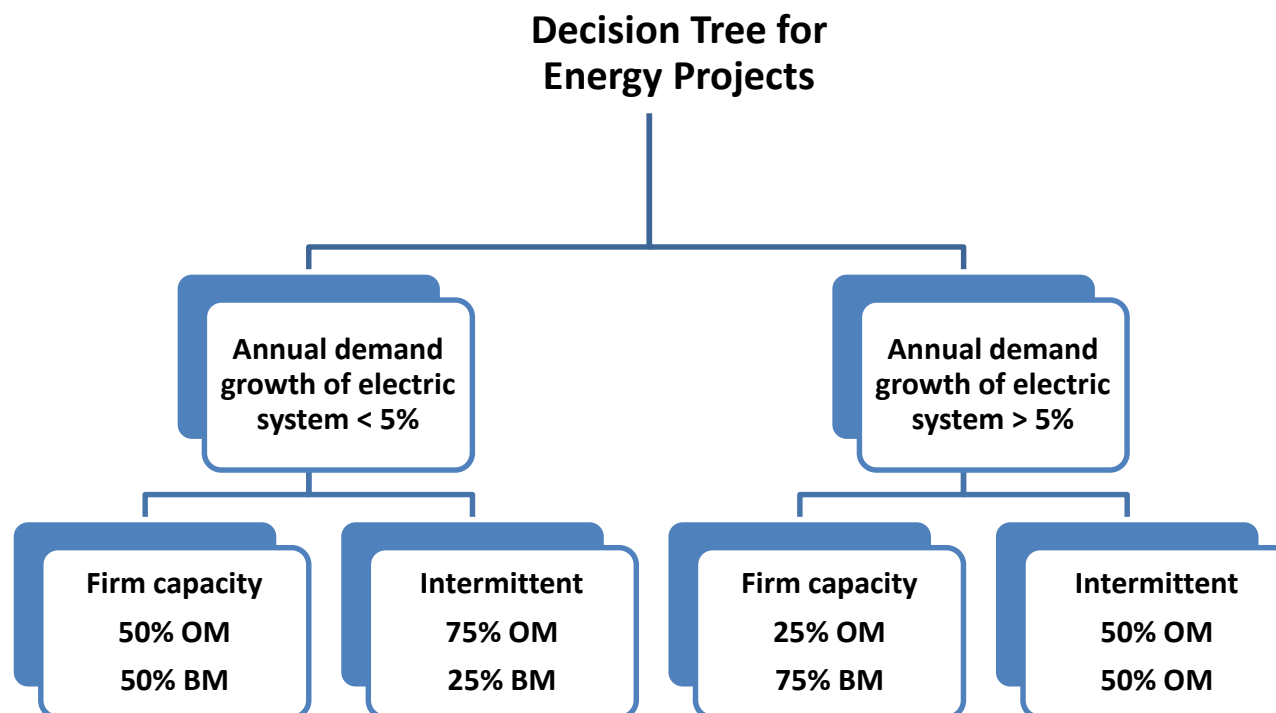




# ENERGY EXAMPLES



# Decision tree for Energy projects



# EXAMPLE 2: WIND ENERGY

## New Wind Farms Germany and Brazil

Absolute Emissions = zero

EIB baseline approach : grid  
connected intermittent RE  
replaces in part existing fossil  
fuel capacity + in part  
forecast incremental build

(75/25 or 50/50)



## EXAMPLE 2: WIND FARM IN GERMANY

- ❖ Expected electricity generation = 300 MW \* 25% load factor = **660** GWh pa
- ❖ Based on the OM factors and BM assumptions as outlined in the Methodologies – split **75/25** in country where demand growth < 5%
- ❖ OM = **495** GWh \* 704 t CO<sub>2</sub>e/GWh = 348.5 kt CO<sub>2</sub>e pa
- ❖ BM = **165** GWh \* 354 t CO<sub>2</sub>e/GWh = 58.4 kt CO<sub>2</sub>e pa

Absolute = 0

Baseline = 407 kt CO<sub>2</sub>e pa

Relative = minus 407 kt CO<sub>2</sub>e pa

## EXAMPLE 2: WIND FARM IN BRAZIL

- ❖ Expected electricity generation = 660 GWh pa
- ❖ Based on the OM factors and BM assumptions as outlined in the Methodologies – split **50/50** in country where demand growth **> 5%** and BM based on 80% firm RE/nuclear, 5% gas, 10% fuel oil , 5% coal
- ❖ OM = **330** GWh \* 795 t CO<sub>2</sub>e/GWh = 262.4 kt CO<sub>2</sub>e pa
- ❖ BM = **330** GWh \* 121 t CO<sub>2</sub>e/GWh = 39.9 kt CO<sub>2</sub>e pa

Absolute = 0

Baseline = 302 kt CO<sub>2</sub>e pa

Relative = minus 302 kt CO<sub>2</sub>e pa



For info or further questions on the activities of the  
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