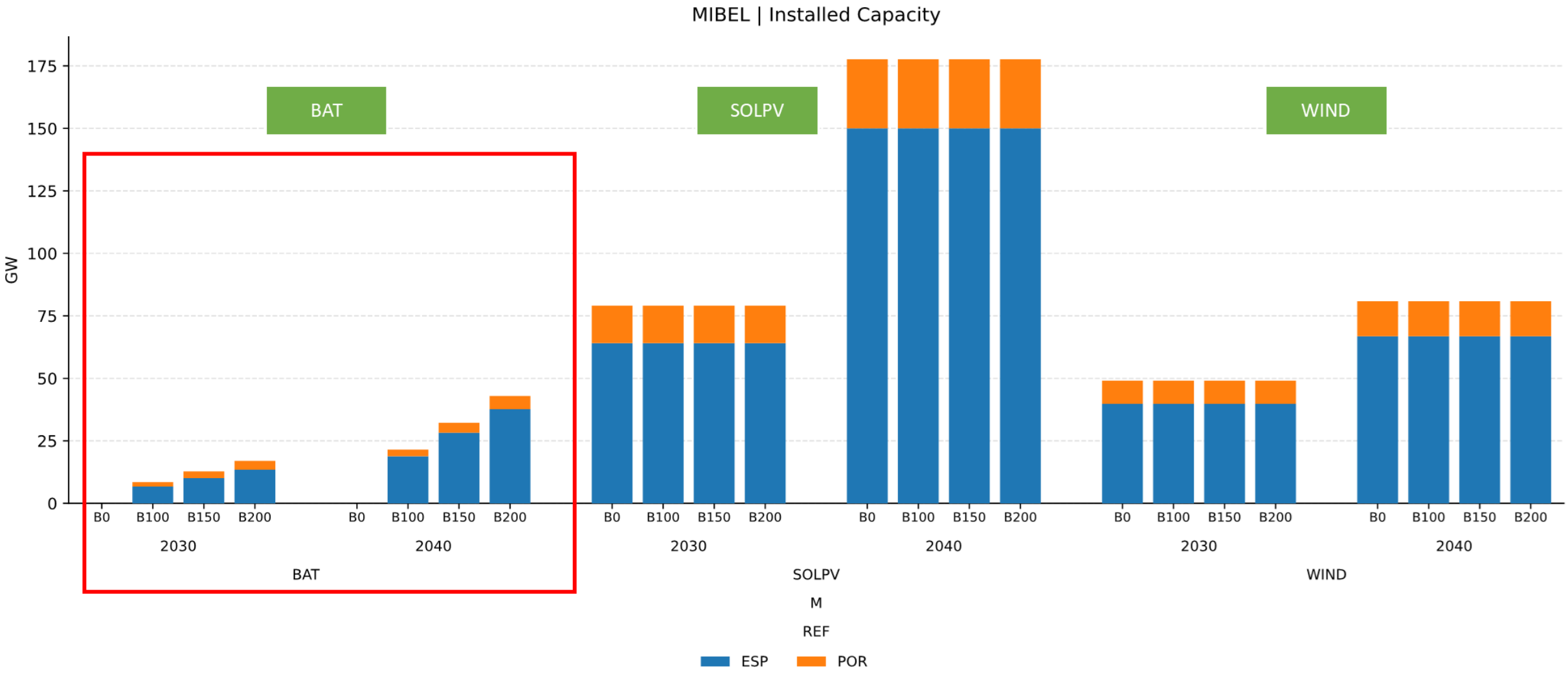
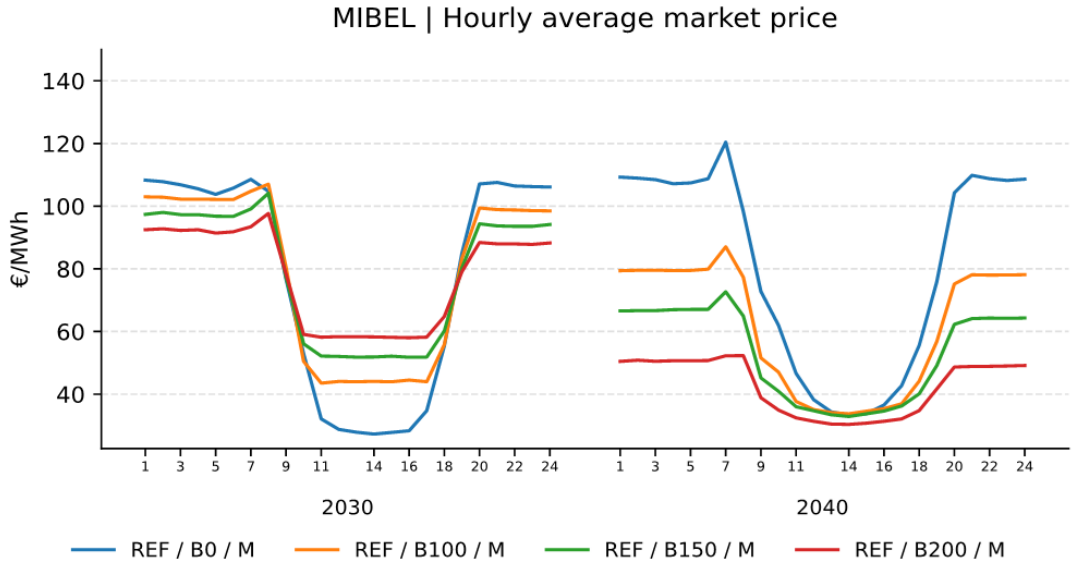
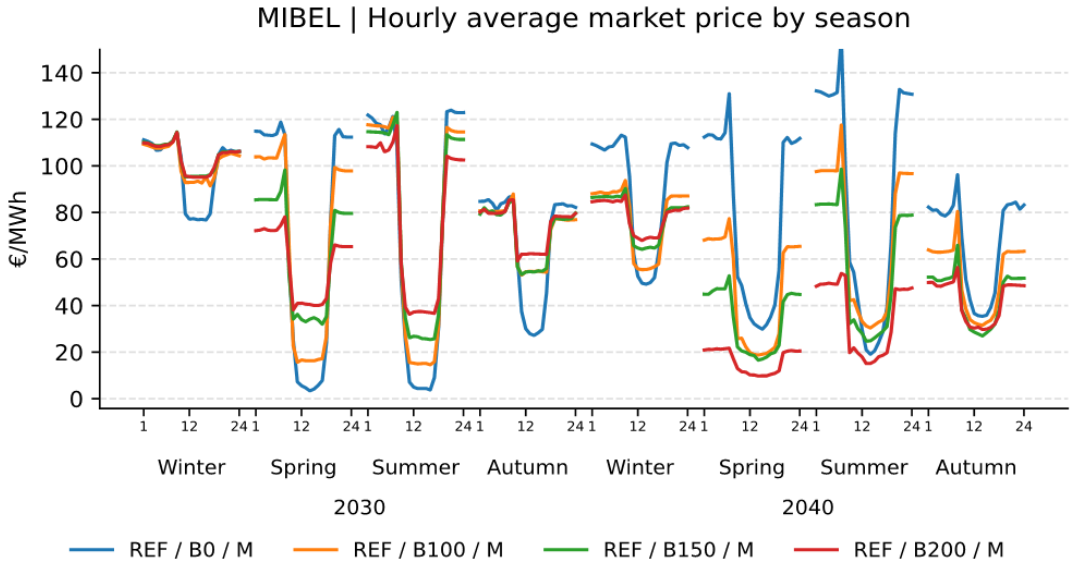
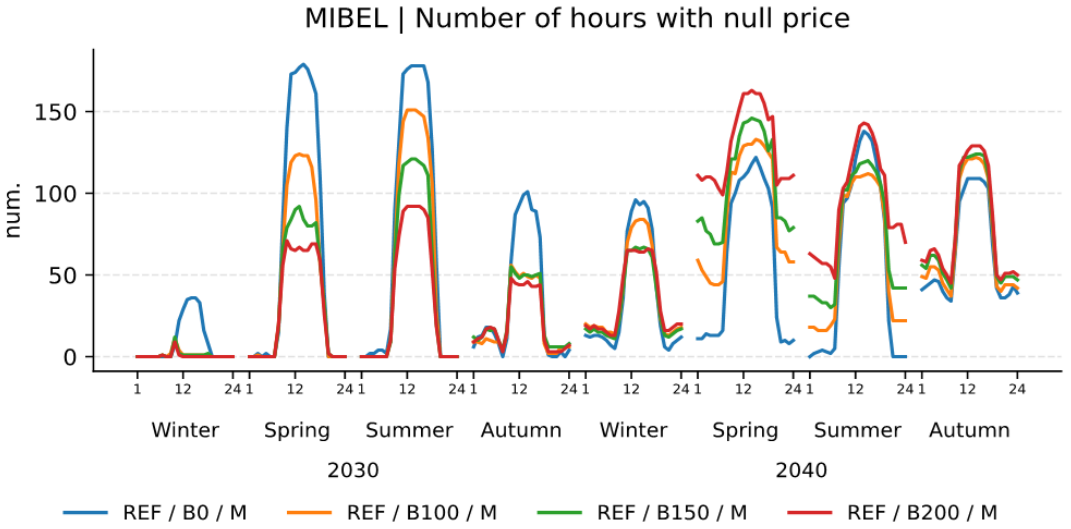
Potências instaladas na Península Ibérica 2030 e 2040

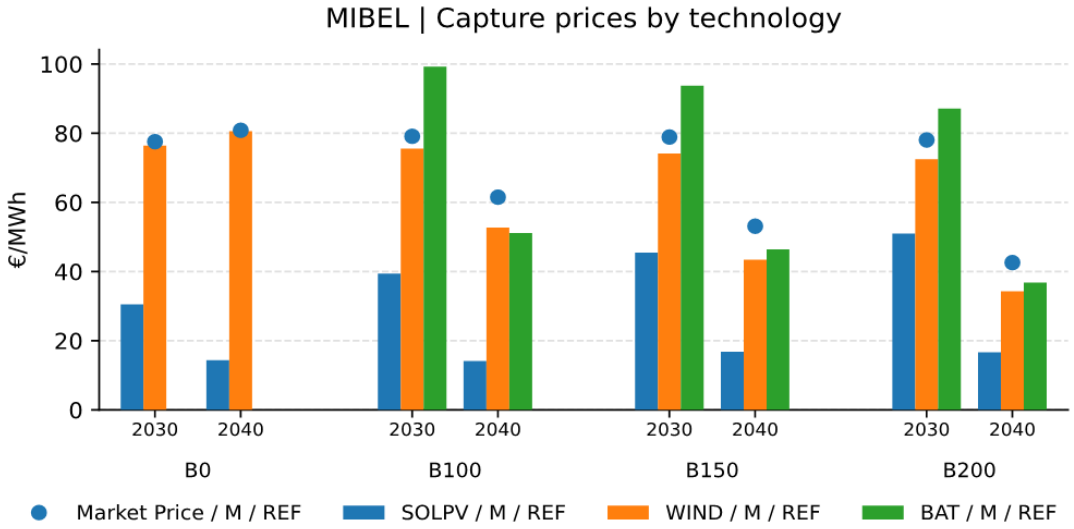


Resultados MIBEL 2030 e 2040 (hidraulicidade média)

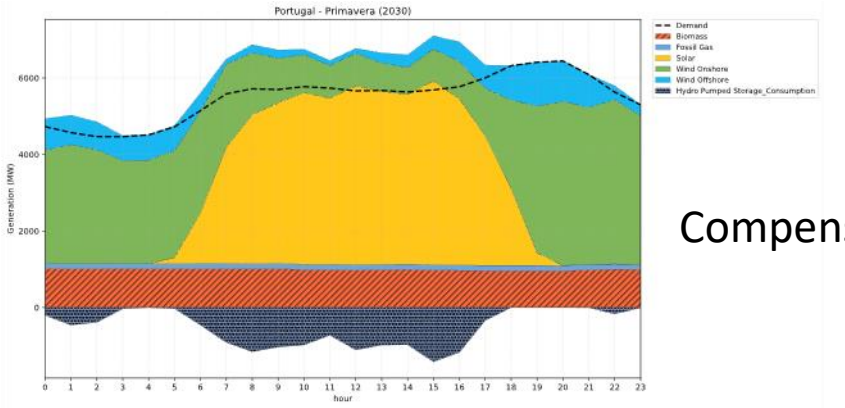




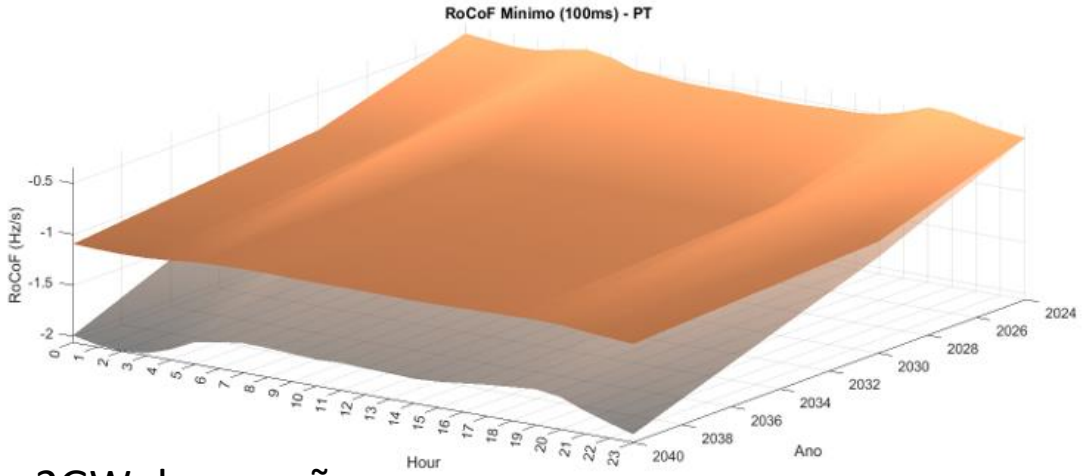




Fornecimento de novos serviços de sistema por baterias (inércia virtual / inércia síncrona)



Compensação síncrona

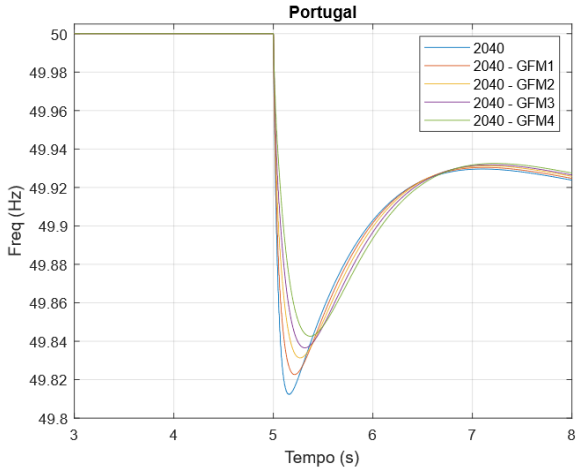


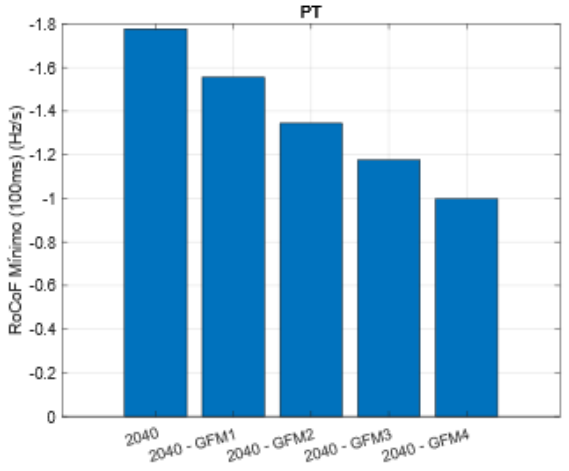
	Portugal			Espanha			
Caso	**FCR-GFM (GW)**	**D(p.u.)**	**M(p.u.)**	**FCR-GFM (GW)**	**D (p.u.)**	**M (p.u.)**	**Caso SC equivalente**
GFM 1	0.16	0.5	0.8	0.12	0.4	0.6	#CS ES = 2 & #CS PT =1
GFM 2	0.32	1.1	1.6	0.24	0.8	1.2	#CS ES = 4 & #CS PT =2
GFM 3	0.32	1.1	1.6	0.48	1.6	2.4	#CS ES = 8 & #CS PT =2
GFM 4	0.48	1.6	2.4	0.6	2	3	#CS ES = 10 & #CS PT =3

$$D = \frac{P_{GFM}}{1.5\ Hz}$$

$$M = \frac{P_{GFM}}{1\ Hz/s}$$

Perda de 2GW de geração





Os conversores das baterias em modo GFM permitem obter o mesmo resultado que a compensação síncrona