

# EOLIEN ET SOLAIRE UNE ÉNERGIE TRES CHÈRE



## COÛTS COMPLETS LES PLUS ÉLEVÉS

- Coûts Cycle de vie = « Plant level cost » les plus élevés
- Coûts de raccordement au réseau RTE
- Coûts de renforcement du réseau
- Coûts de flexibilité ( gestion intermittence)

Source : Nuclear Energy Agency (NEA) - NEA System Cost Analysis for Integrated Low-Carbon Electricity Systems: A Guide for Stakeholders and Policymakers (oecd-nea.org)

**Table 1. Grid-level system costs for different technologies in France (USD/MWh)**

Technology	Nuclear		Coal		Gas		Onshore wind		Offshore wind		Solar	
	10%	30%	10%	30%	10%	30%	10%	30%	10%	30%	10%	30%
<i>Penetration level</i>												
<b>Total plant level costs</b>	<b>72.23</b>		<b>85.66</b>		<b>87.30</b>		<b>110.76</b>		<b>143.20</b>		<b>551.17</b>	
Back-up, profile or adequacy costs	0.00	0.00	0.33	0.33	0.00	0.00	34.24	36.48	34.24	36.48	47.21	48.16
Balancing costs	0.28	0.27	0.00	0.00	0.00	0.00	1.90	5.01	1.90	5.01	1.90	5.01
Grid connection	1.78	1.78	0.93	0.93	0.54	0.54	6.93	6.93	18.64	18.64	19.60	19.60
Grid reinforcement and extension	0.00	0.00	0.00	0.00	0.00	0.00	3.50	3.50	2.15	2.15	5.41	5.41
<b>Total grid level costs</b>	<b>2.07</b>	<b>2.05</b>	<b>1.26</b>	<b>1.26</b>	<b>0.54</b>	<b>0.54</b>	<b>46.56</b>	<b>51.91</b>	<b>56.93</b>	<b>62.27</b>	<b>74.12</b>	<b>78.17</b>

Source: Adapted from NEA (2012)