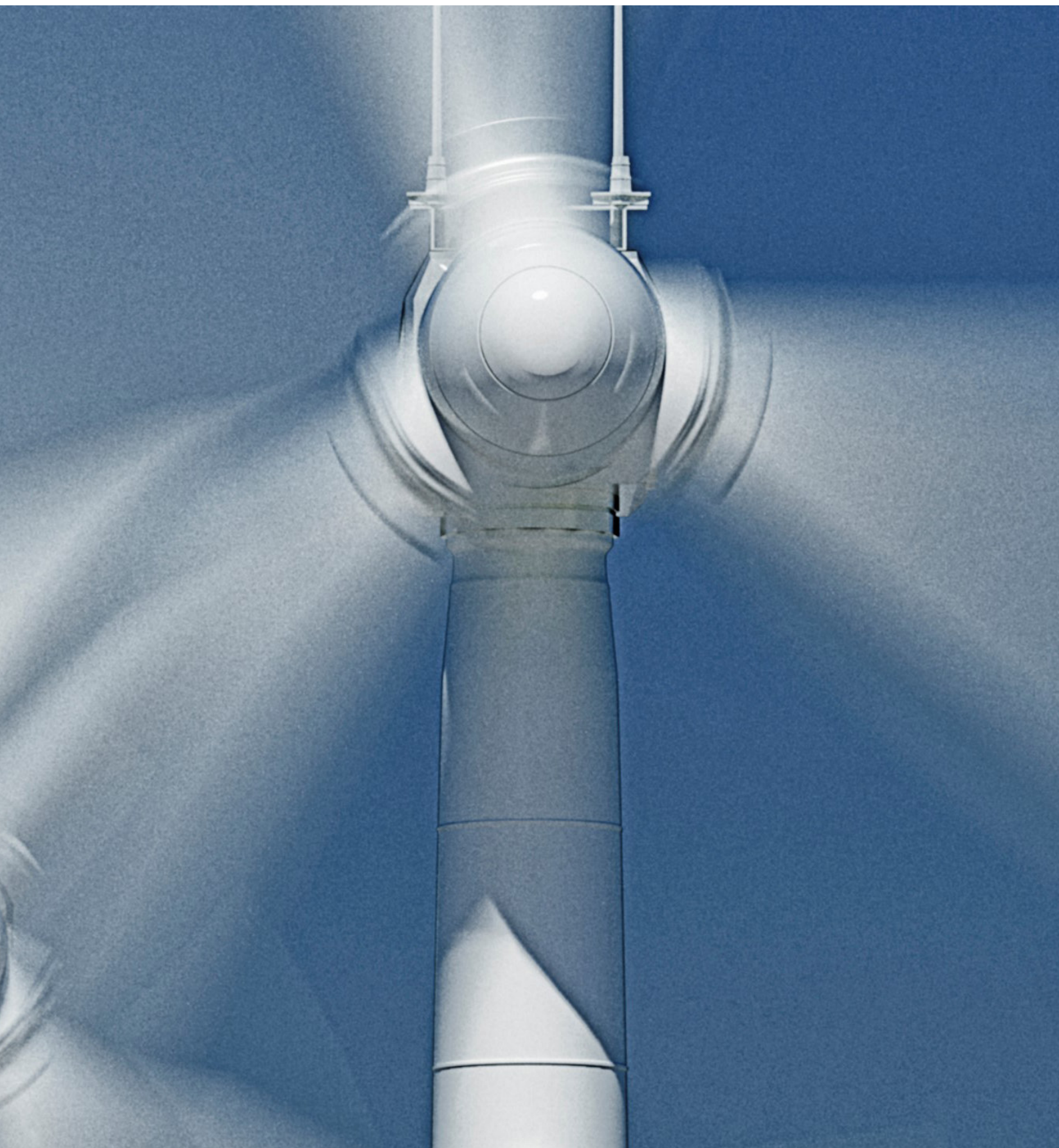


## An attractive investment case for European Union renewables

November 2016

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**1. INTRODUCTION**

This paper provides a primer for investors who may be considering investment in the renewables sector in Europe. This overview describes how proven renewable energy technologies are transforming the energy sector of the EU power market and what opportunities lie ahead in the 2016 - 2020 time frame.

Impax sees a particular investment opportunity for both on- shore Wind and Solar as the most interesting and accessible investment opportunities in Europe. We also review some of the other technologies in order to give investors a broader overview of the sector.

Electricity markets across Europe are undergoing fundamental and rapid change towards a greater reliance on renewable energy. Three imperatives drive this change:

- Securing independence from Russian and North African gas imports
- Mitigating climate change, as evidenced by the decisions announced by the EU Commission in March

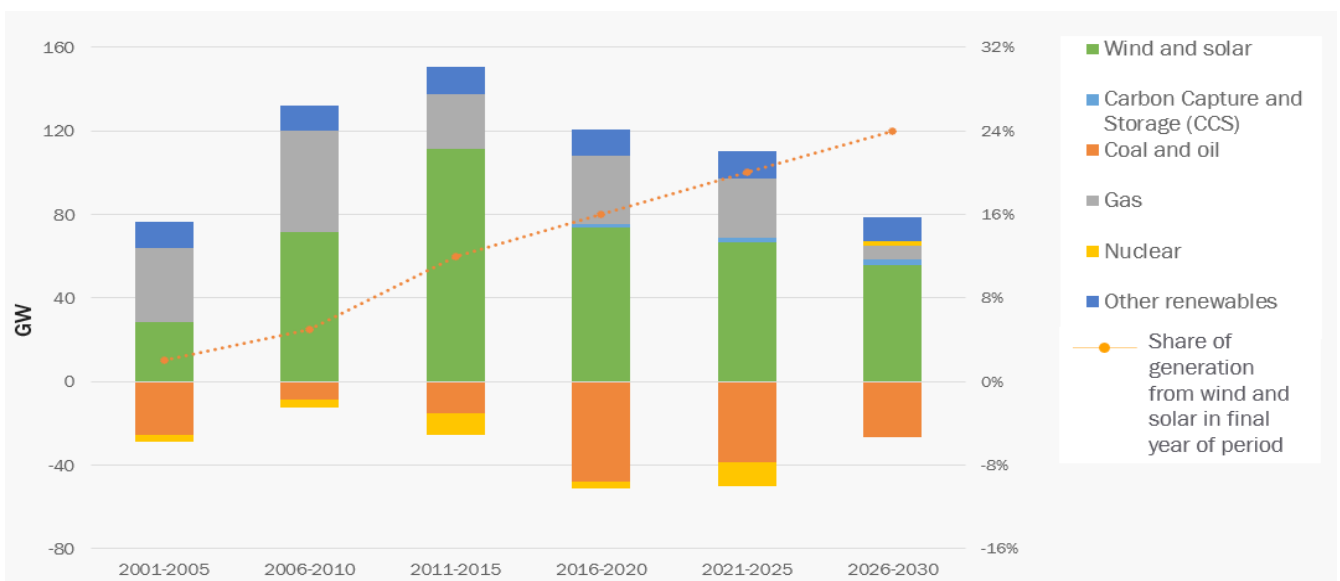
2015 and at the Paris Climate Agreement in December 2015

- Post-Fukushima, reducing nuclear power operations in the 2018-2025 time frame, while avoiding a gap in electricity supplies.

Based on the three imperatives for change and the supporting market context described above, renewables have made up the majority of new capacity investment in Europe in most years since 2005. Renewables accounted for 79% and 72% of new capacity additions in the EU in 2014 and 2013 respectively<sup>1</sup>.

The International Energy Agency expects that the combination of EU climate change policies, renewable energy targets at both EU and member state levels, energy security imperatives and declining technology costs will continue to drive the strong growth in renewables across EU member states. Most of this growth will come from Wind and Solar and these sources are projected to account for 24% of total power generation in the EU by 2030 (see Figure 1 below).

**FIGURE 1: RENEWABLES GRADUALLY REPLACING COAL AND NUCLEAR; EU NET CAPACITY ADDITIONS (GW) AND SHARE OF GENERATION FROM WIND AND SOLAR (% OF TOTAL TWh) 2001 - 2030**



Source: Wind in Power, 2014 European Statistics, European Wind Energy Association (2015). This is a forward looking statement. There may be important factors that could cause actual outcomes to differ from those

indicated here. Impax undertakes no obligation to update any forward looking statement. <sup>1</sup>Wind in Power, 2014 European Statistics, European Wind Energy Association, February 2015.