

# The Cost of “Peace of Mind” - a Review of terms and costs of O&M contracts offered by OEMs

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## Abstract

Increased focus on Levelised Cost of Energy (LCOE) is leading wind project owners, funders and investors to consider the long term options available to them with regards to O&M strategy. The most commonly selected O&M strategy option, in particular by small to medium portfolio owners, is to sign long term, comprehensive in scope, O&M contracts with Original Equipment Manufacturers (OEMs). This “peace of mind”, low risk strategy however also comes at a price and also usually is the most expensive option.

## Objectives

This poster presents a comparative review of the terms and costs observed in the onshore wind industry for long term O&M contracts, therefore providing a “benchmark” to owners, funders and investors, to be used in their financial model or to explore alternative to these contracts.

## Methods

Natural Power is conducting numerous due diligences internationally. This paper focuses on the European market in general and selected countries such as the UK, Ireland, France, Finland, and Germany in particular.

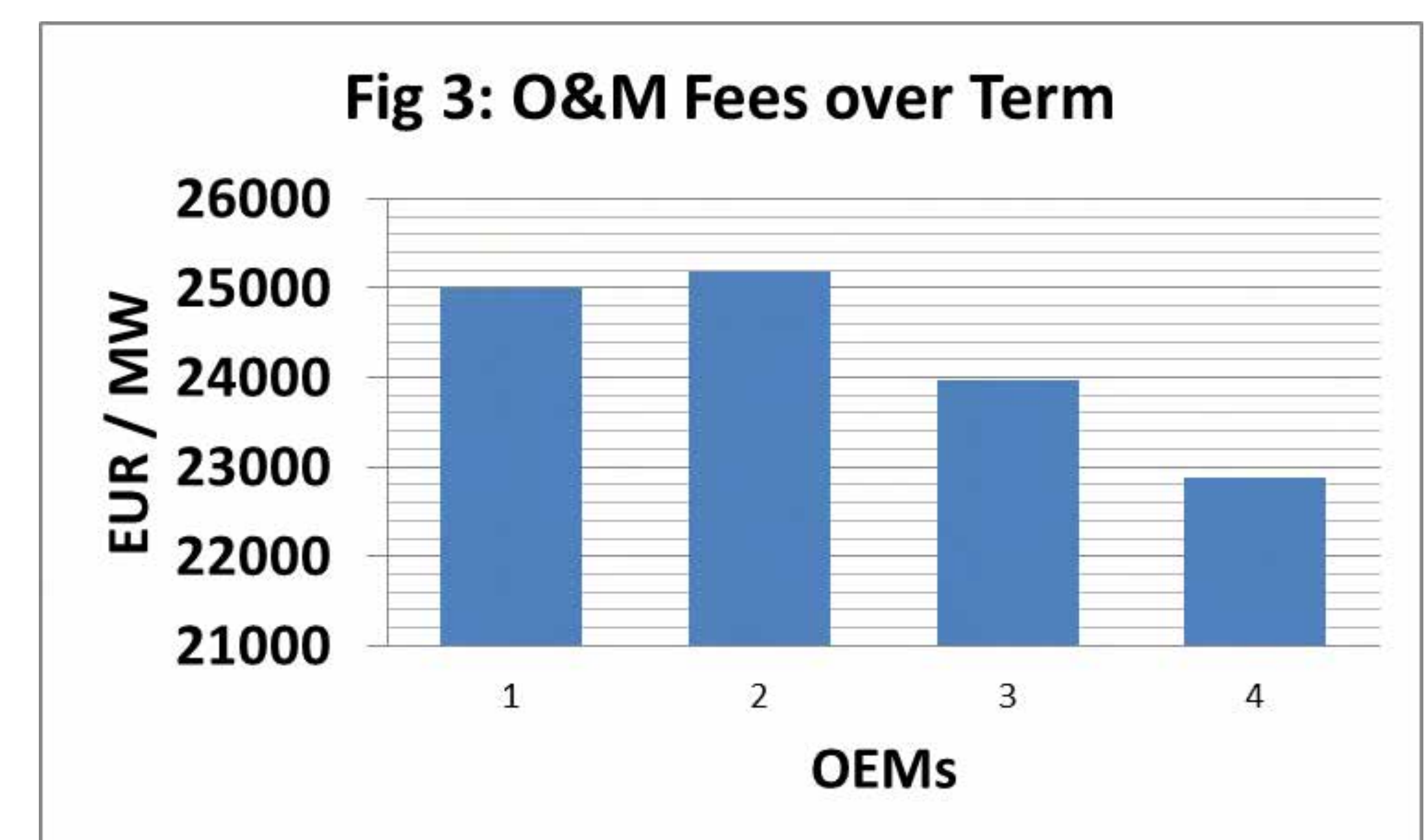
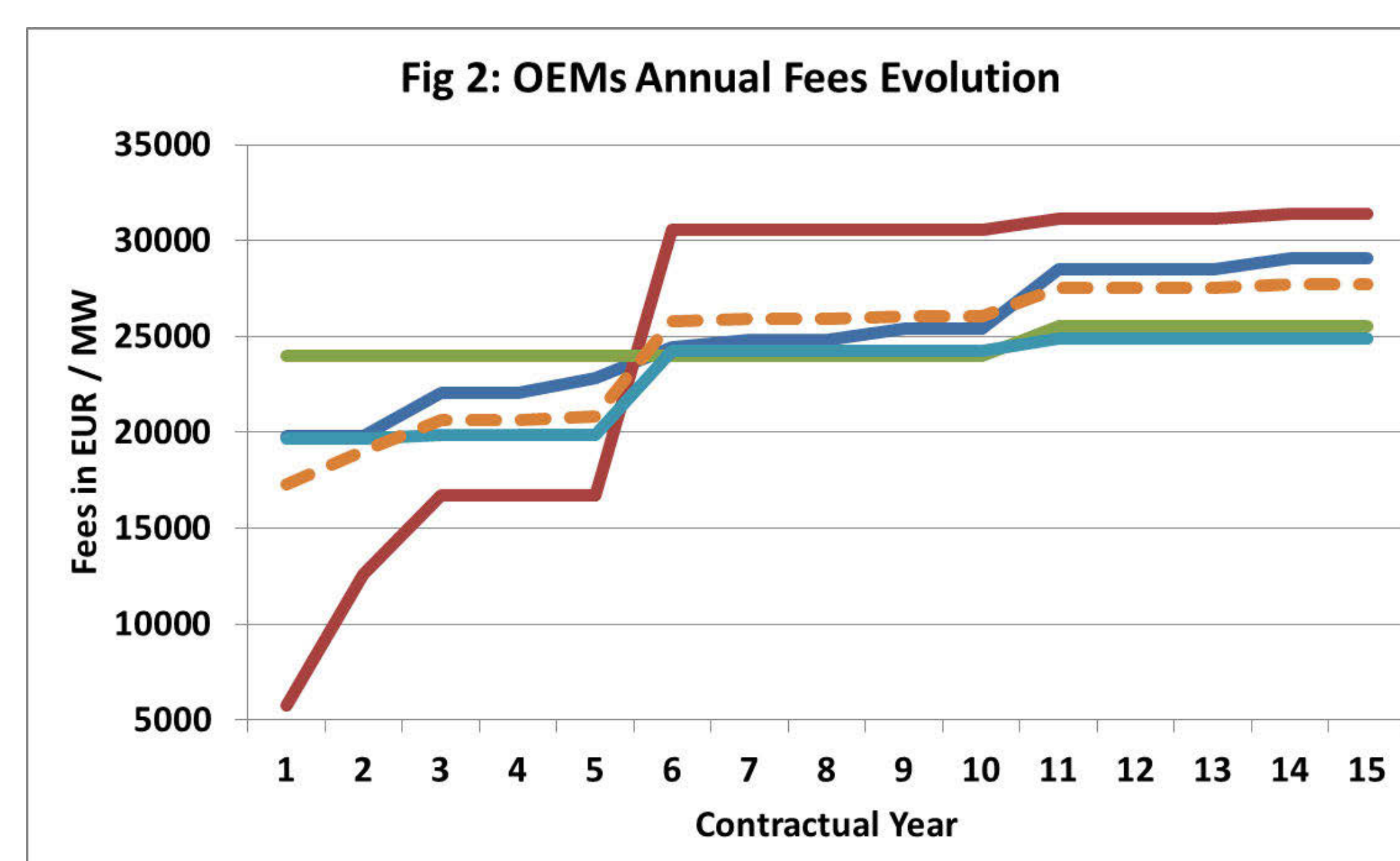
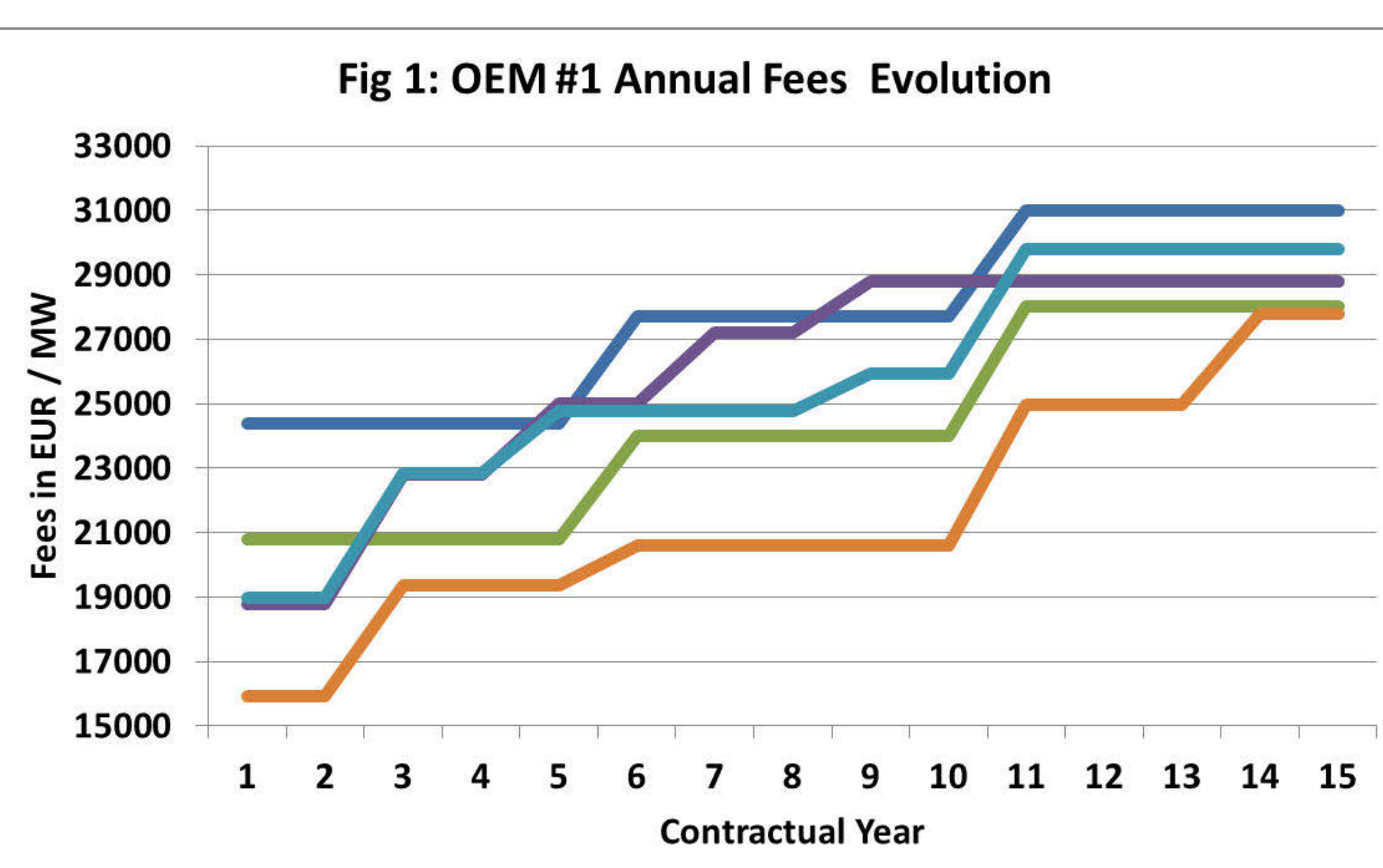
Natural Power maintains an internal database (1) in which we record the main contractual terms and fees associated to the main construction and operation contracts. This database includes main manufacturers such as Vestas, Enercon, Nordex, Senvion, and GE. The confidentiality of OEMs offerings has been respected by insuring that the information presented is anonymised.

O&M contracts terms of between 5 to 15 years have been observed. Costs, usually presented in unit of Currency / WTG or Currency / MWh, have been normalised to a common unit of EUR / MW in order to allow meaningful comparisons to be performed.

Figure 1 presents, for 5 wind projects serviced by one OEM, how O&M fees evolve with time during the term of the contracts. This figure demonstrates (1) the relatively narrow range of fees within given years and (2) the price escalation observed usually at year 6 and 11 within contracts.

Figure 2 presents the average yearly fees observed for 4 OEMs across a total number of 23 projects (solid lines), as well as averaged across these 4 OEMs. It is interesting to observe some difference between the pricing structures, with one manufacturer offering low initial fees, but larger fees from year 6, while most other manufacturers offer a more gradual escalation.

Finally, Figure 3 presents the average fees over the 15 years contracts lifetime for 4 OEMs. A narrow range of O&M fees of between 22,900 EUR/MW and 25,200 EUR/MW is observed between these four OEMs.



## Conclusions

This paper has presented a comparative review of the terms and costs observed in the industry for the long term O&M contracts, therefore providing a “benchmark” to owners, funders and investors, which can be used in their financial model or to explore alternative to these contracts. A narrow range of O&M fees of between 22,900 EUR/MW and 25,200 EUR/MW is observed between these four OEMs.

## References

1. Natural Power Internal Contracts Database

