

Validation of WP3 data

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Overview

20.6.2006

- Review on technologic, environmental and economic data from WP3
- Comparison of WP3 – TIMES-EE – PRIMES
- Comprehensive comparison of the database



WP3 data review - Introduction

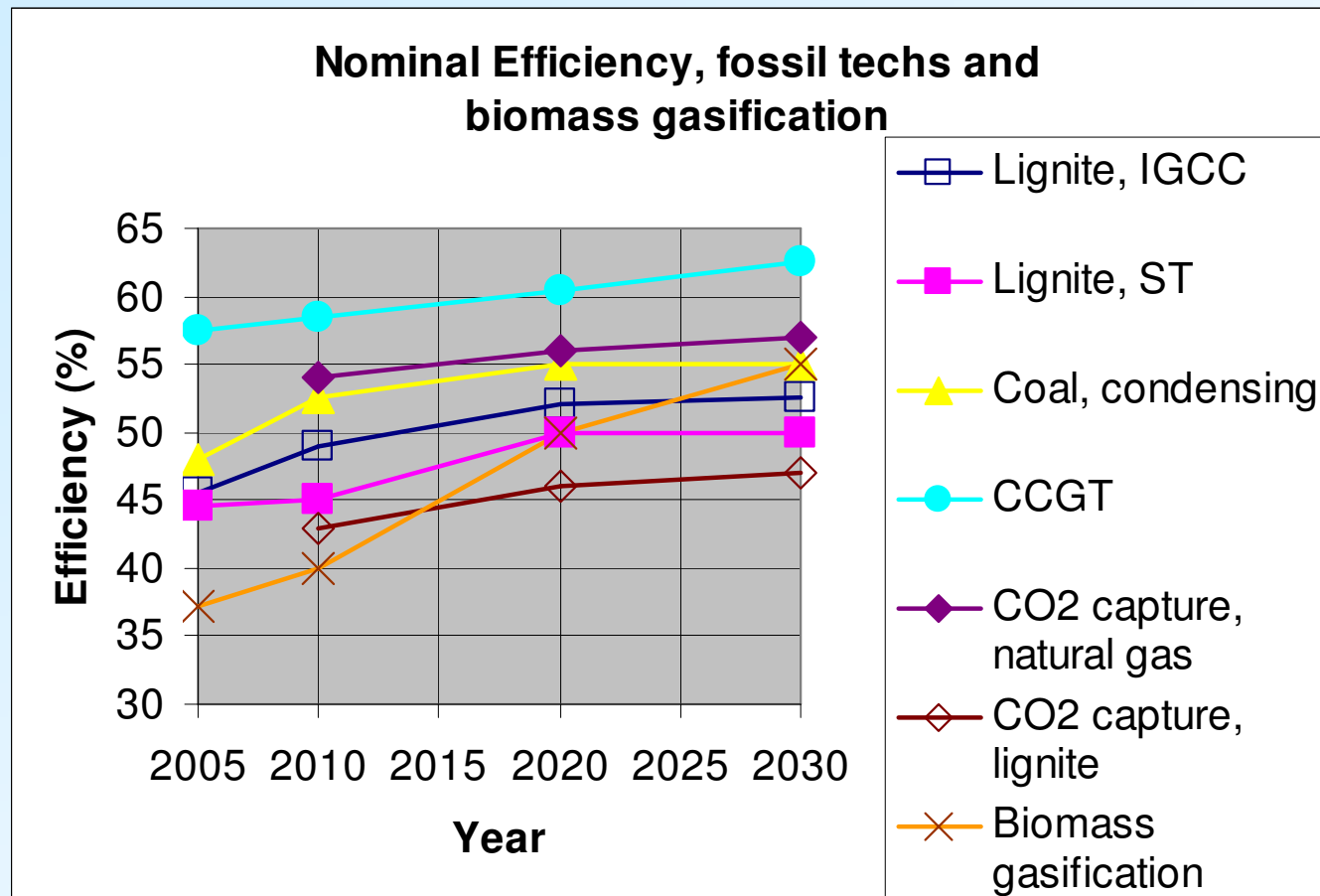
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- Data collection in WP3
 - Key technological, economical and environmental parameters are available for all conventional technologies.
 - Renewables: Emerging technologies not available
 - Future data: Some data gaps remain
 - Less important parameters partly missing
- Review on most relevant parameters
 - Efficiency
 - Investment cost, O&M cost
 - CO2 emissions



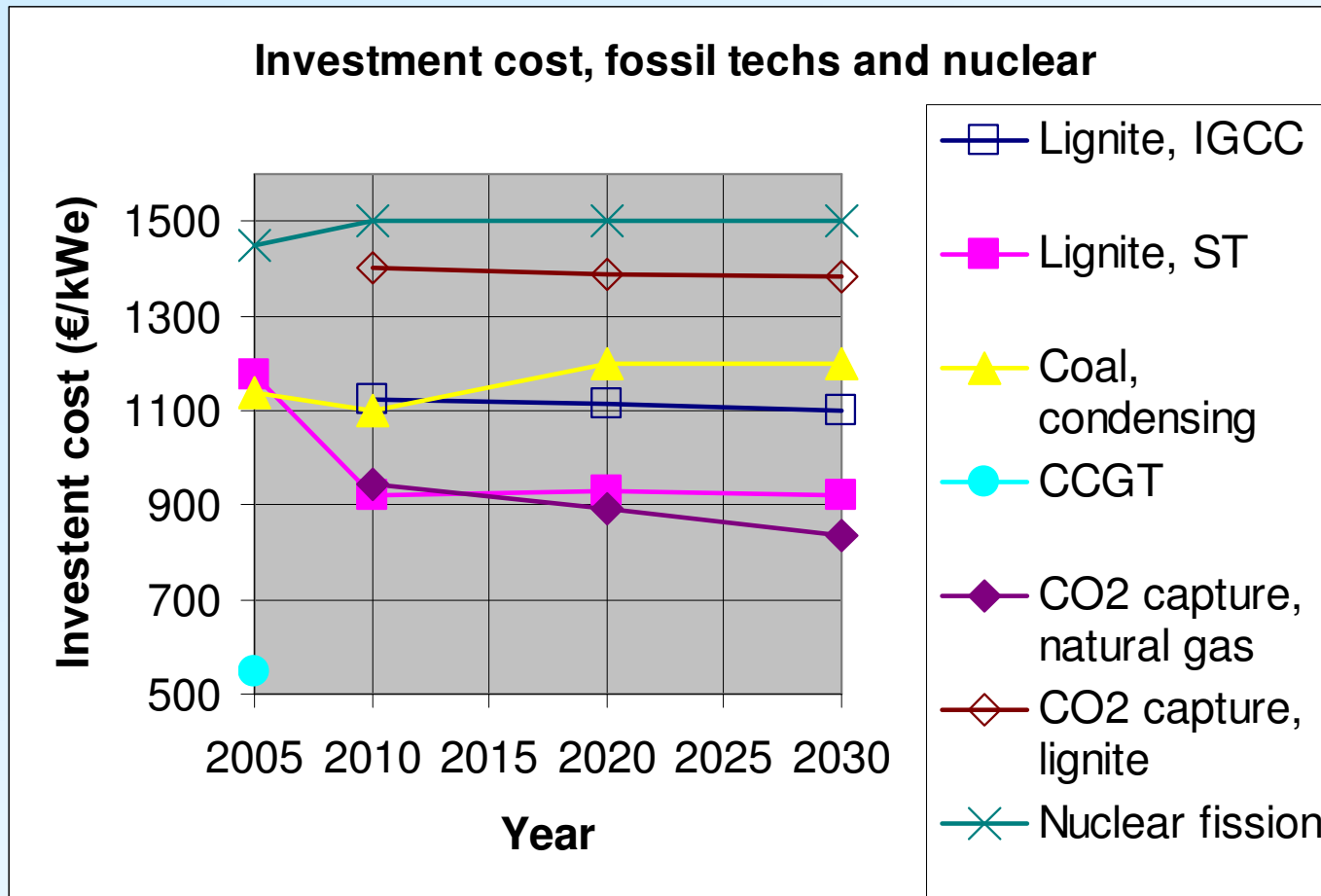
WP3 data review - Efficiency

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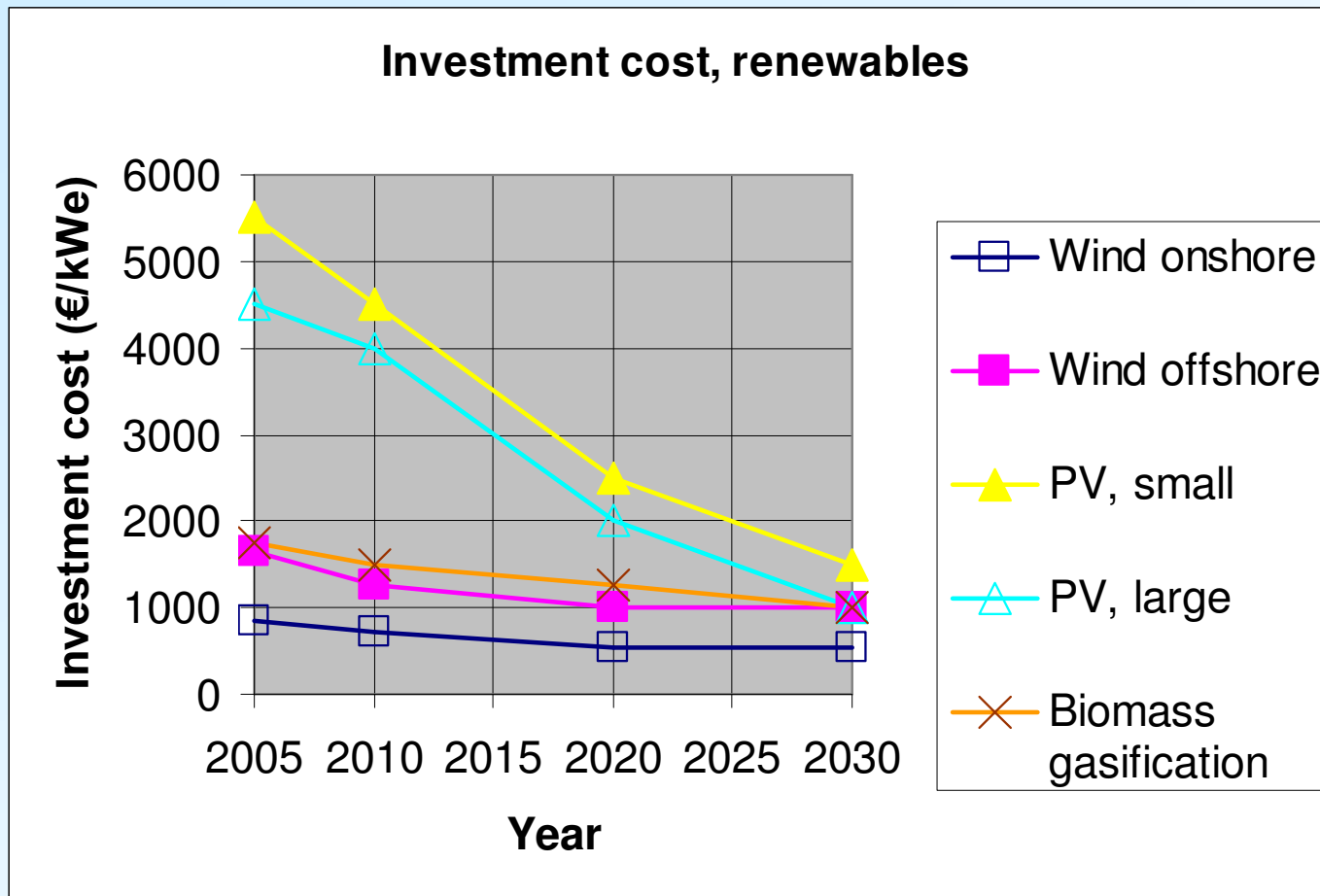
WP3 data review – Investment cost

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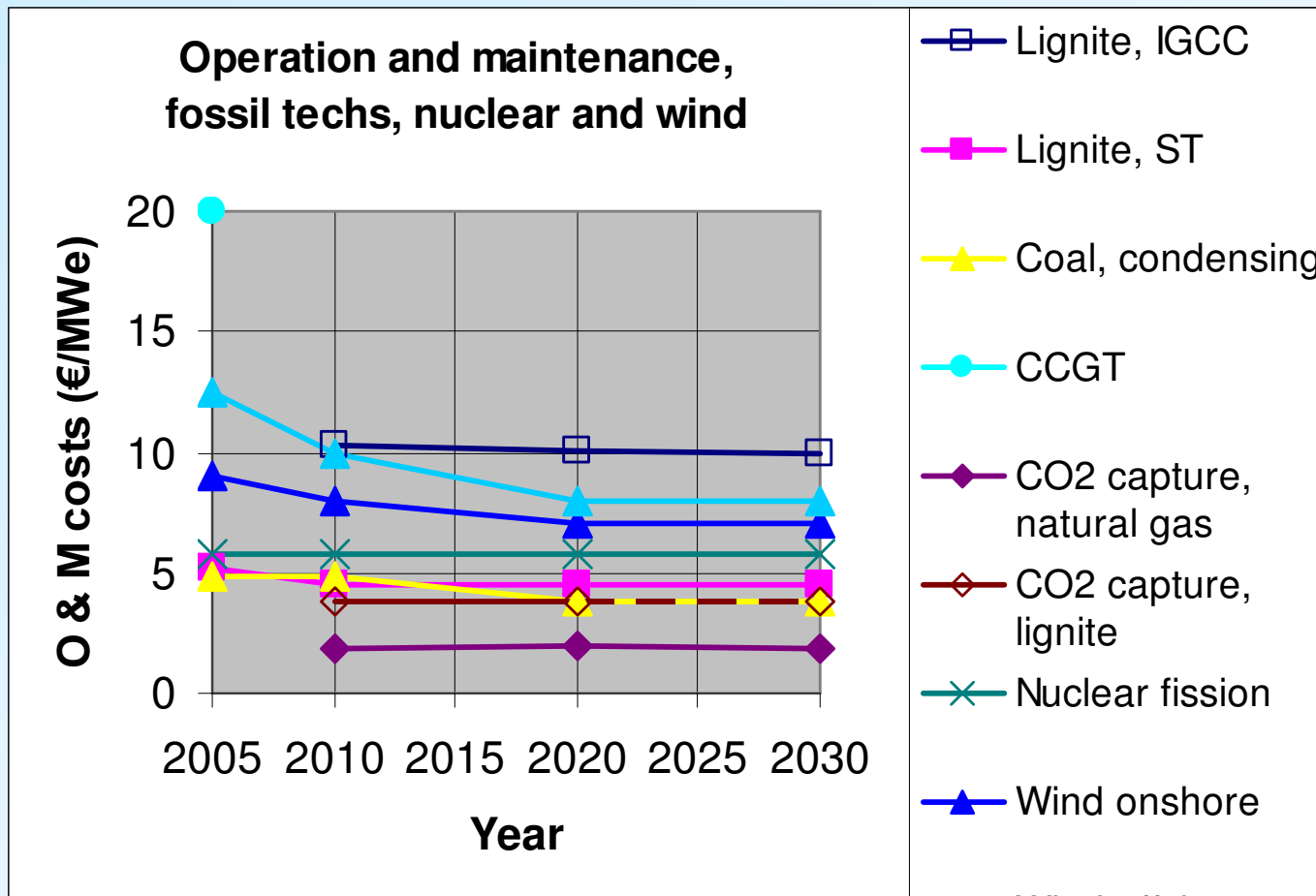
WP3 data review – Investment cost cont.

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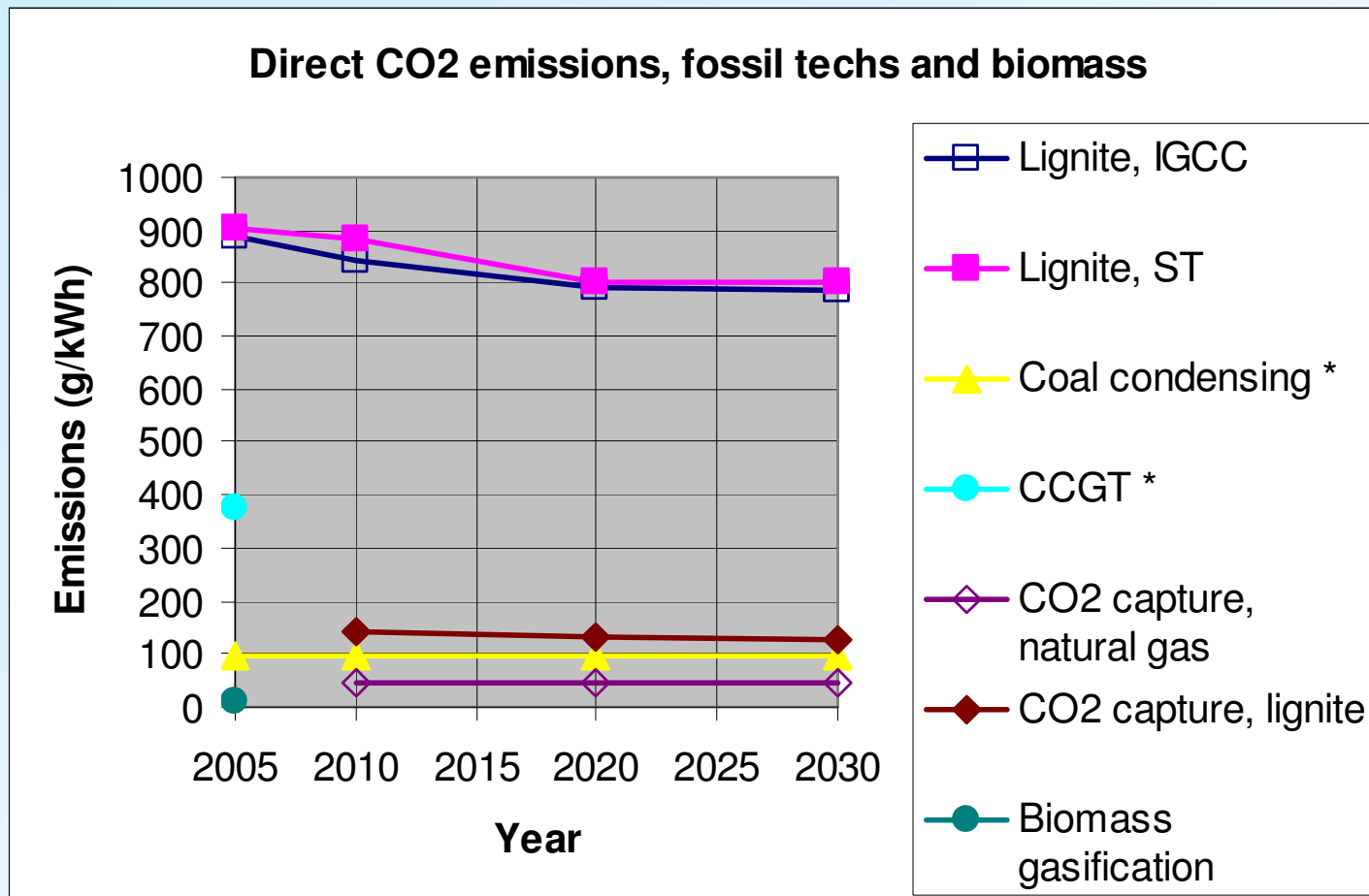
WP3 data review – O&M cost

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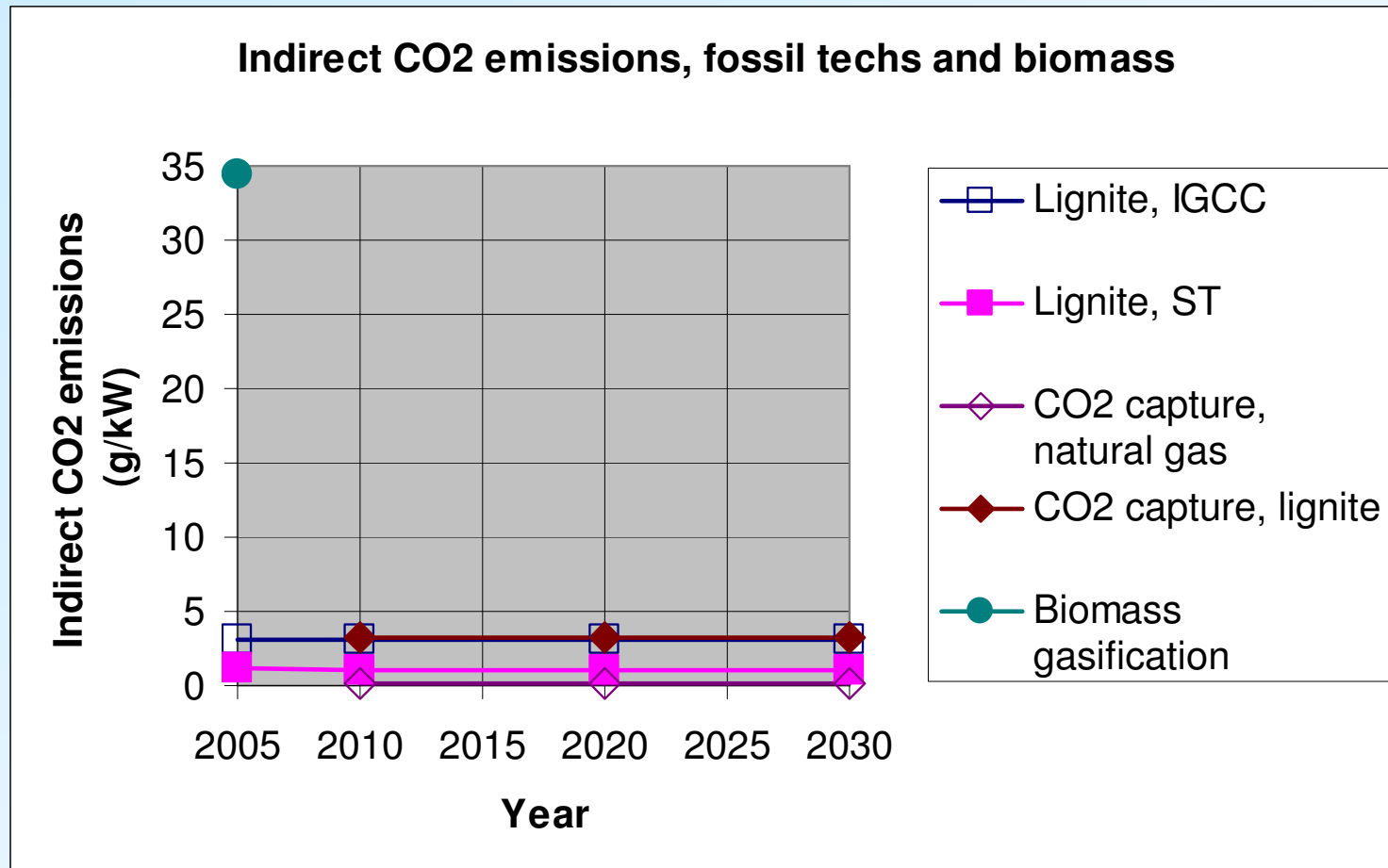
WP3 data review – CO₂ emissions

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WP3 data review – CO₂ emissions cont.

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Comparison of WP3 – TIMES-EE – PRIMES

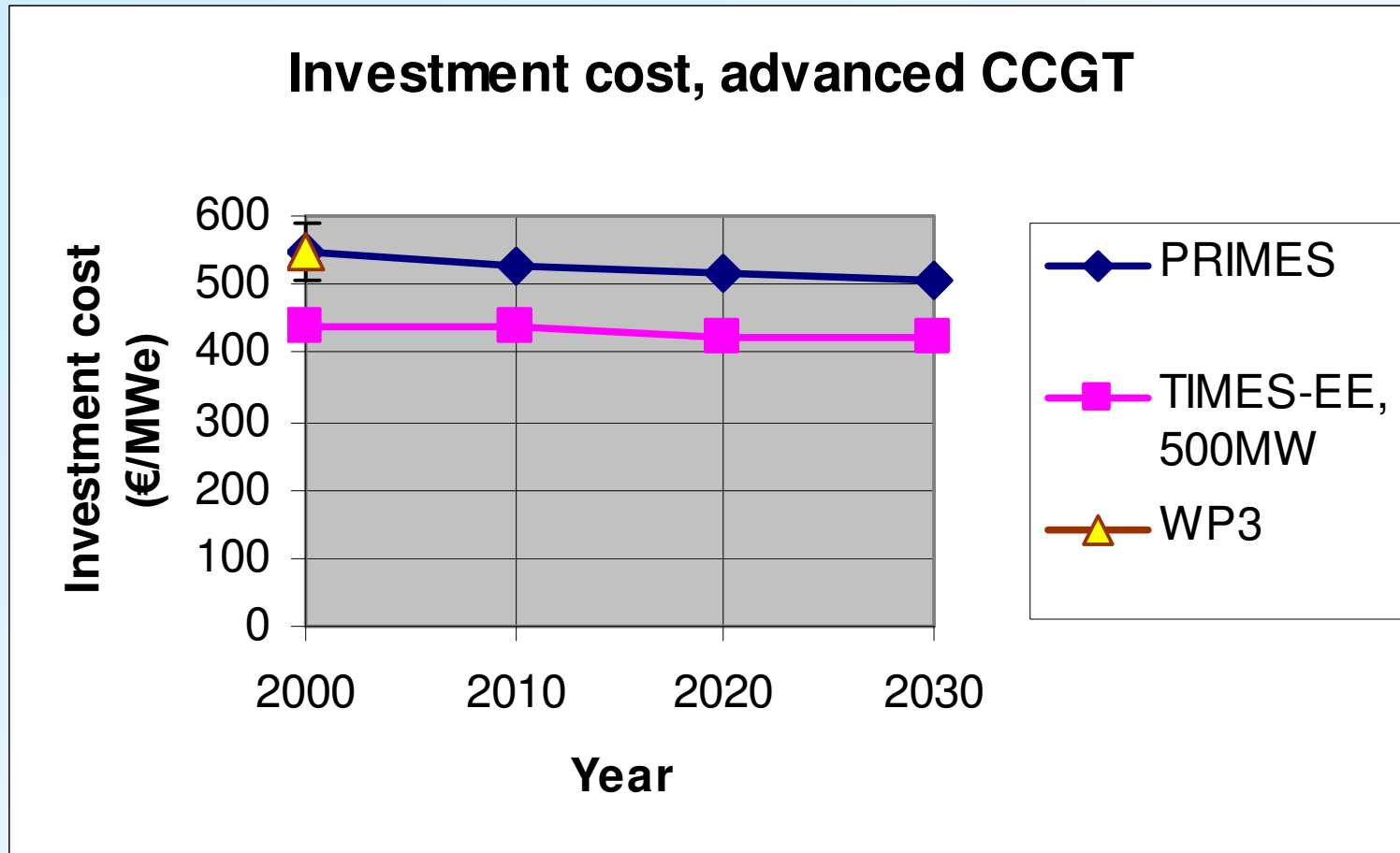
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- Comparison of investment cost
 - Advanced CCGT
 - Modern coal
 - 3rd. generation nuclear
- TIMES and PRIMES data applied directly
 - Differences in their computation methods effects data



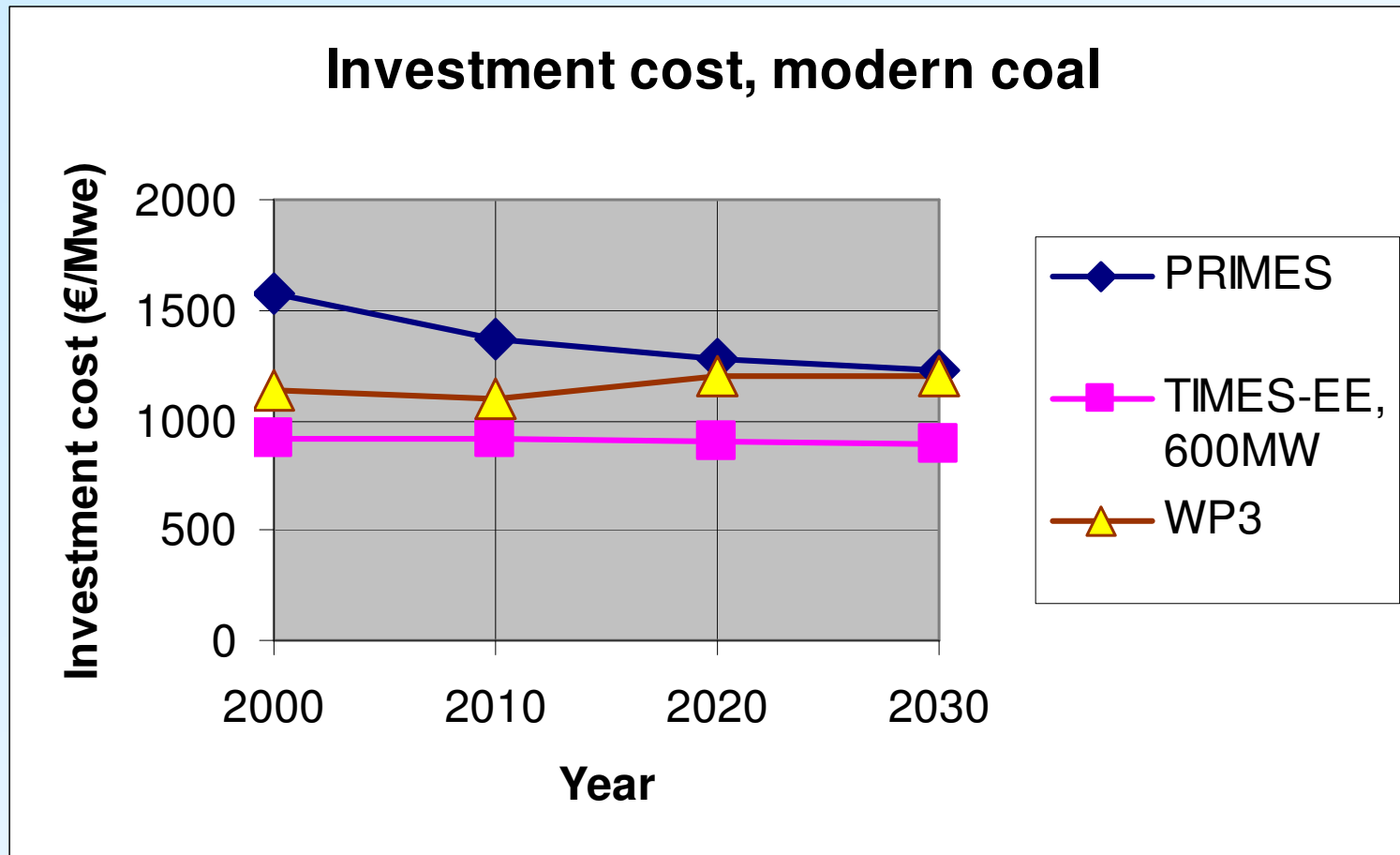
Comparison of WP3 – TIMES-EE – PRIMES

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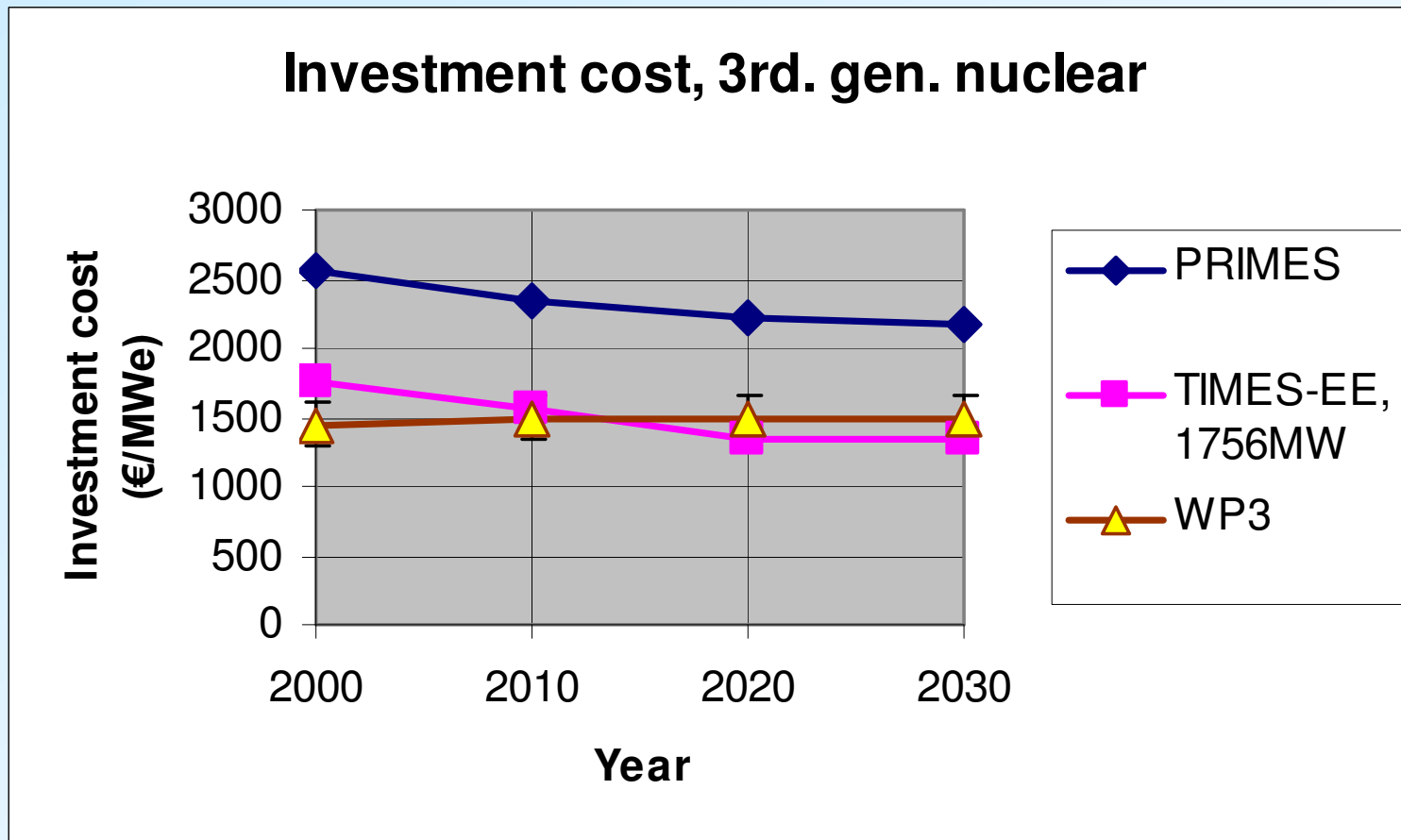
Comparison of WP3 – TIMES-EE – PRIMES

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Comparison of WP3 – TIMES-EE – PRIMES

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Comprehensive comparison of the database

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- WP3 – TIMES comparisons
 - Fossil technologies have slightly lower prices in WP3
 - Wind in same range
 - PV roughly the same, WP3 more pessimistic in 2010-2020.
 - Hydro, tidal, fuel cells, geothermal missing data 2010-2030
 - 2005 TIMES data within the large ranges of these techs in WP3
 - Hydro data is exception, much higher in WP3

