

# Cost-Benefit Analysis of Smart Meter Deployment in Poland

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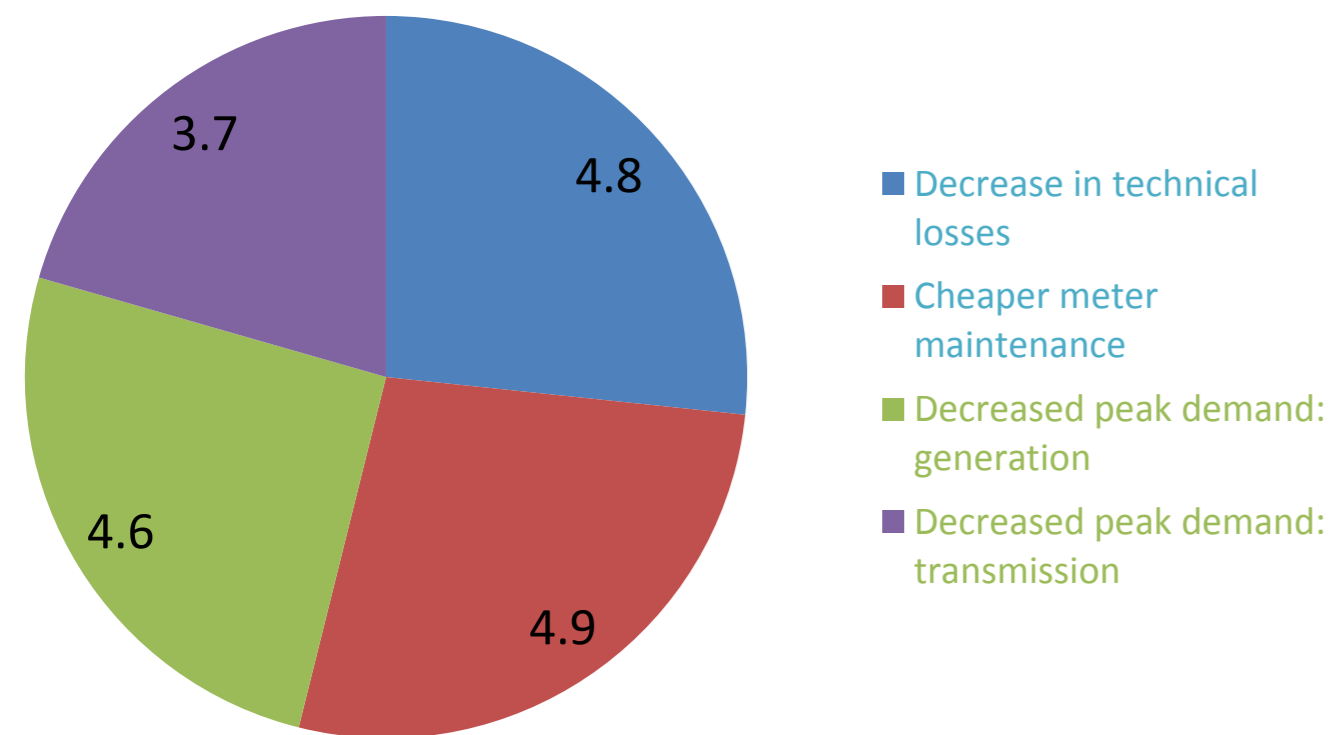
## Motivation and Methodology

Smart meters implementation in Poland is behind schedule. Why the projected 80% of replacement rate most likely will not be reached by 2020? What can be do to turn the tide? In order to answer these questions Cost-Benefit Analysis is conducted using completed deployment data, applying existing studies as templates and EC guidelines.

## Benefits

Quantitative benefits (in billion PLN, 1GBP = 5.89PLN, as of 16.08.2015):

direct and indirect



Qualitative benefits:

- Integration of renewables in the grid
- Information and reliability

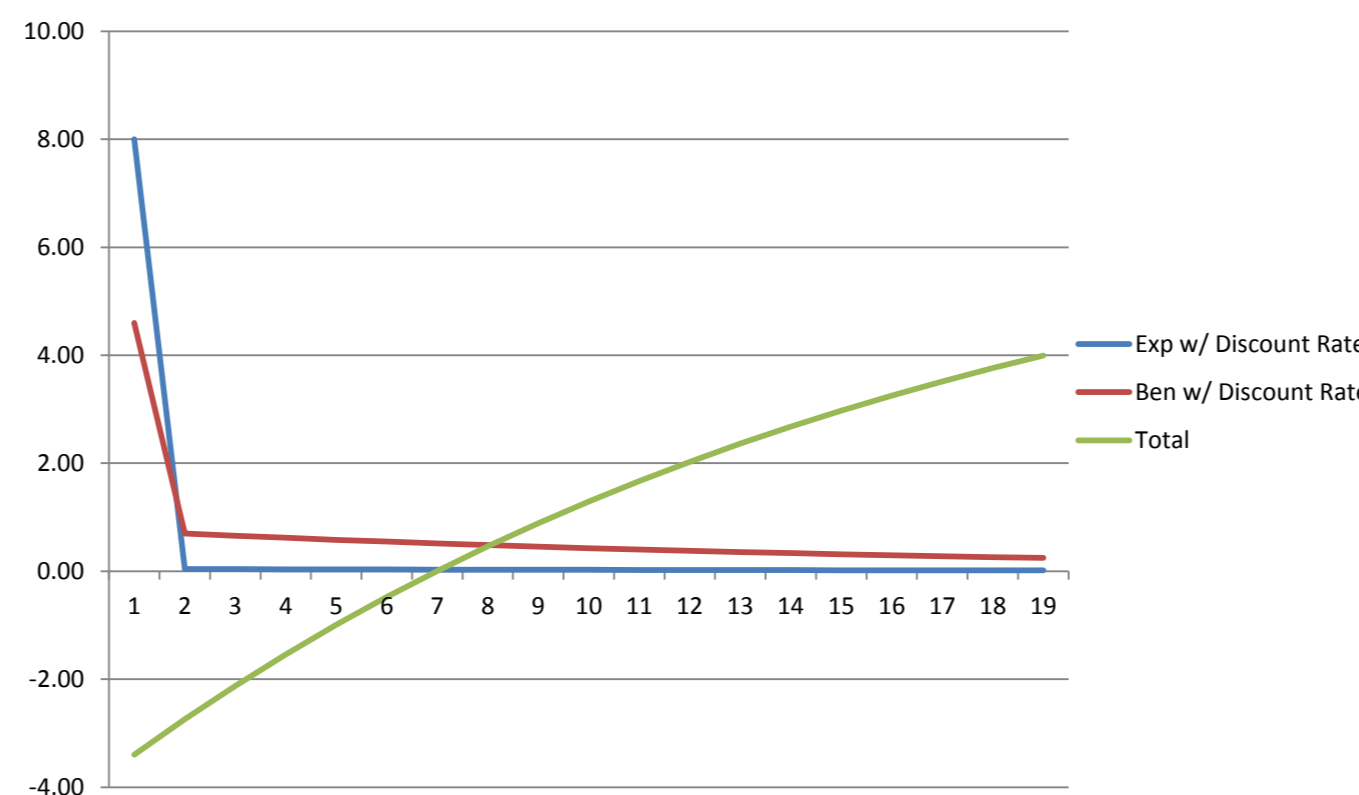
## Costs

Facts about costs:

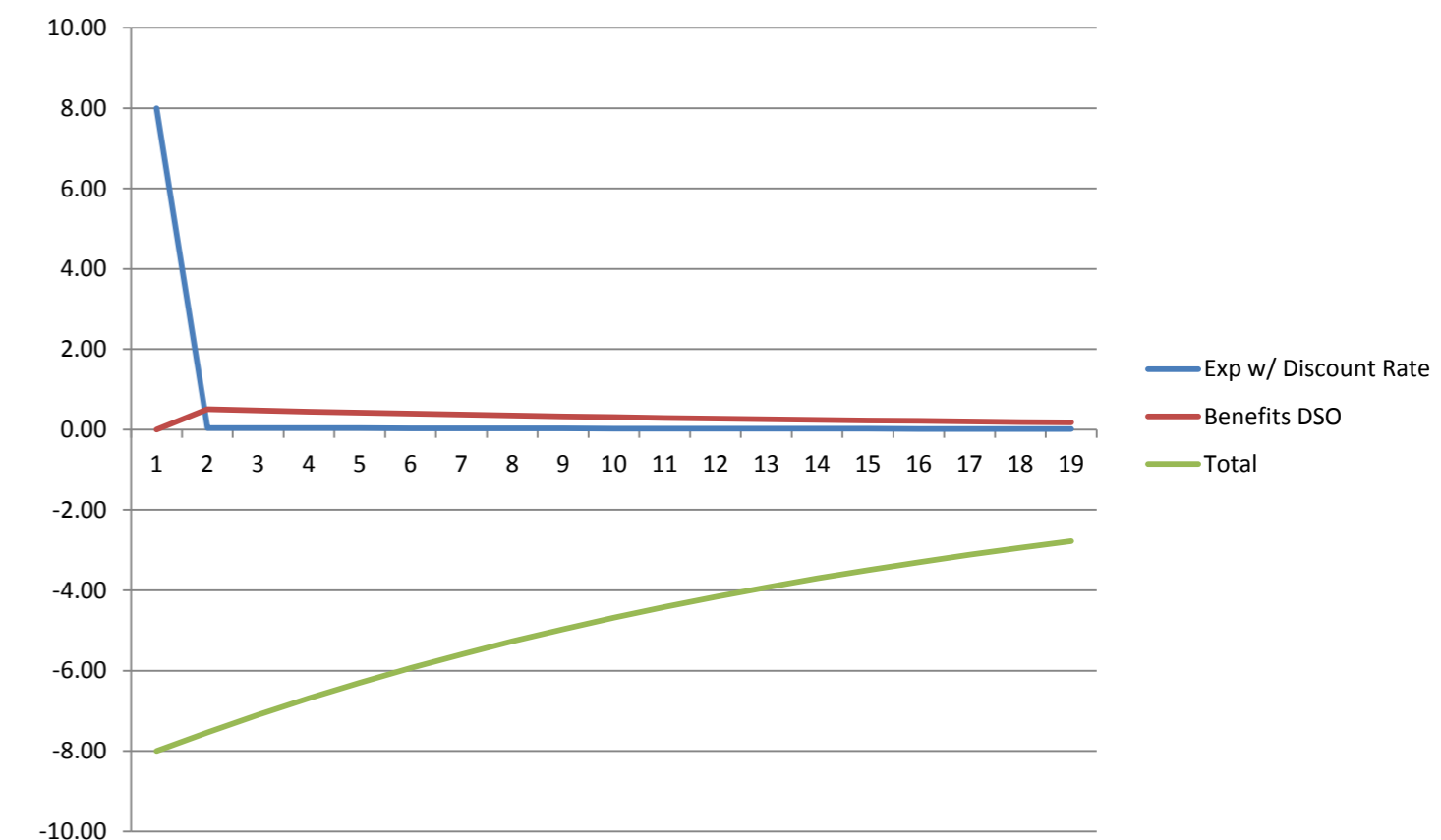
- Distribution system operator (DSO) bare the costs (despite many beneficiaries)
- The bulk of the cost occurs at the moment of deployment; the cost of hardware (meters and concentrators) is 8 billion PLN
- Meter maintenance is below 0.8 billion PLN for a 16-year period

## Findings

- Current regulations discourage DSOs from implementing smart meters (an 8-year legalising period)
- The NPV for the period of the study (16 years) was positive and reached 4 billion PLN



-On the other hand, NPV for the DSO is negative:



## Recommendations

- Smart meter deployment will have a positive effect for the economy, and therefore their implementation should be facilitated
- Current legalising period should be extended to 15 years rather than the current 8
- For renewable development in Poland to be economically justifiable, smart meters should be deployed
- Spreading costs vertically among the electricity production and selling chain can encourage smart meter rollouts