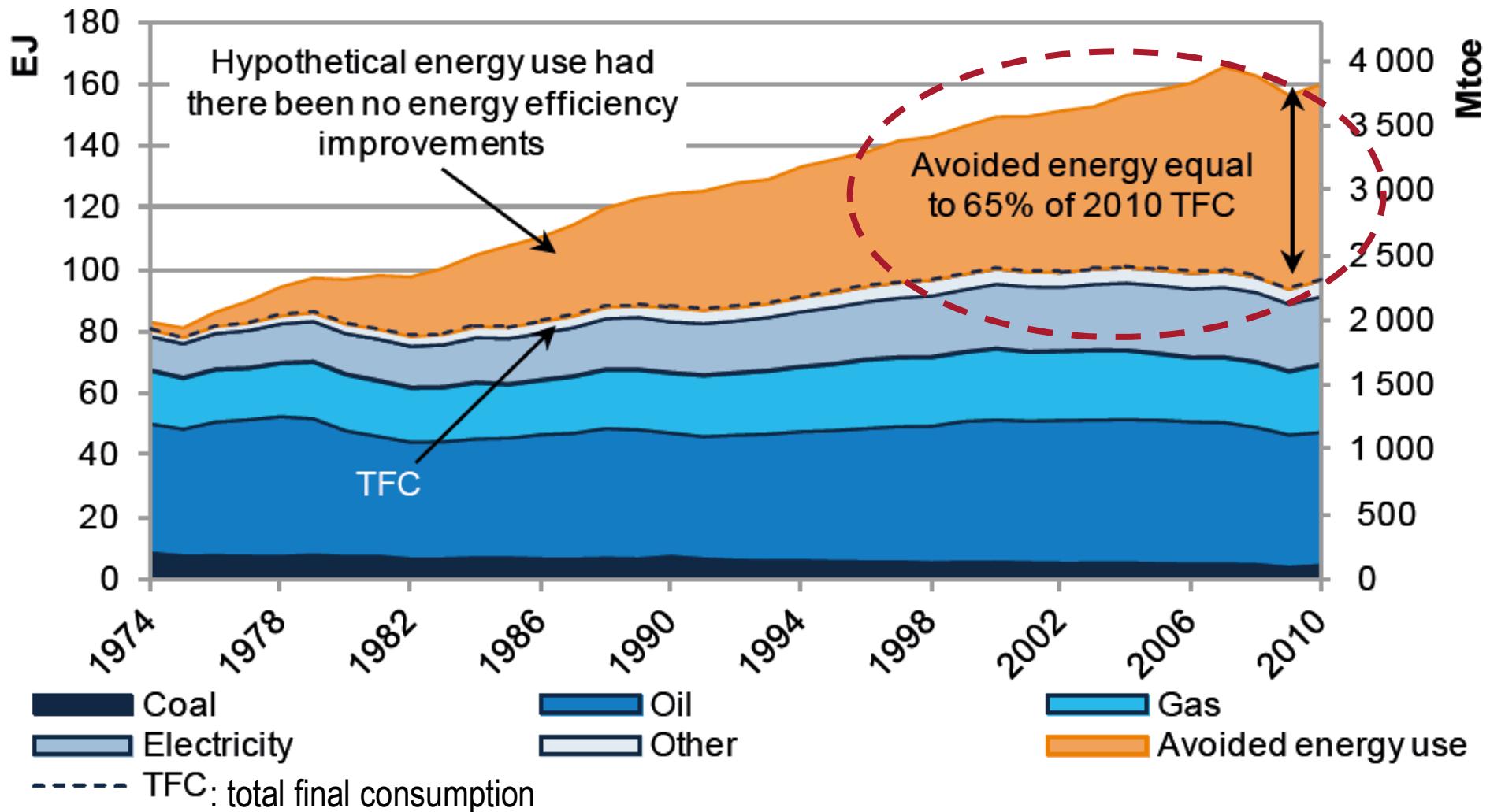


Partenariat Tuniso-Allemand de l'énergie

Economic Potentials and Multiple Benefits of Energy Efficiency

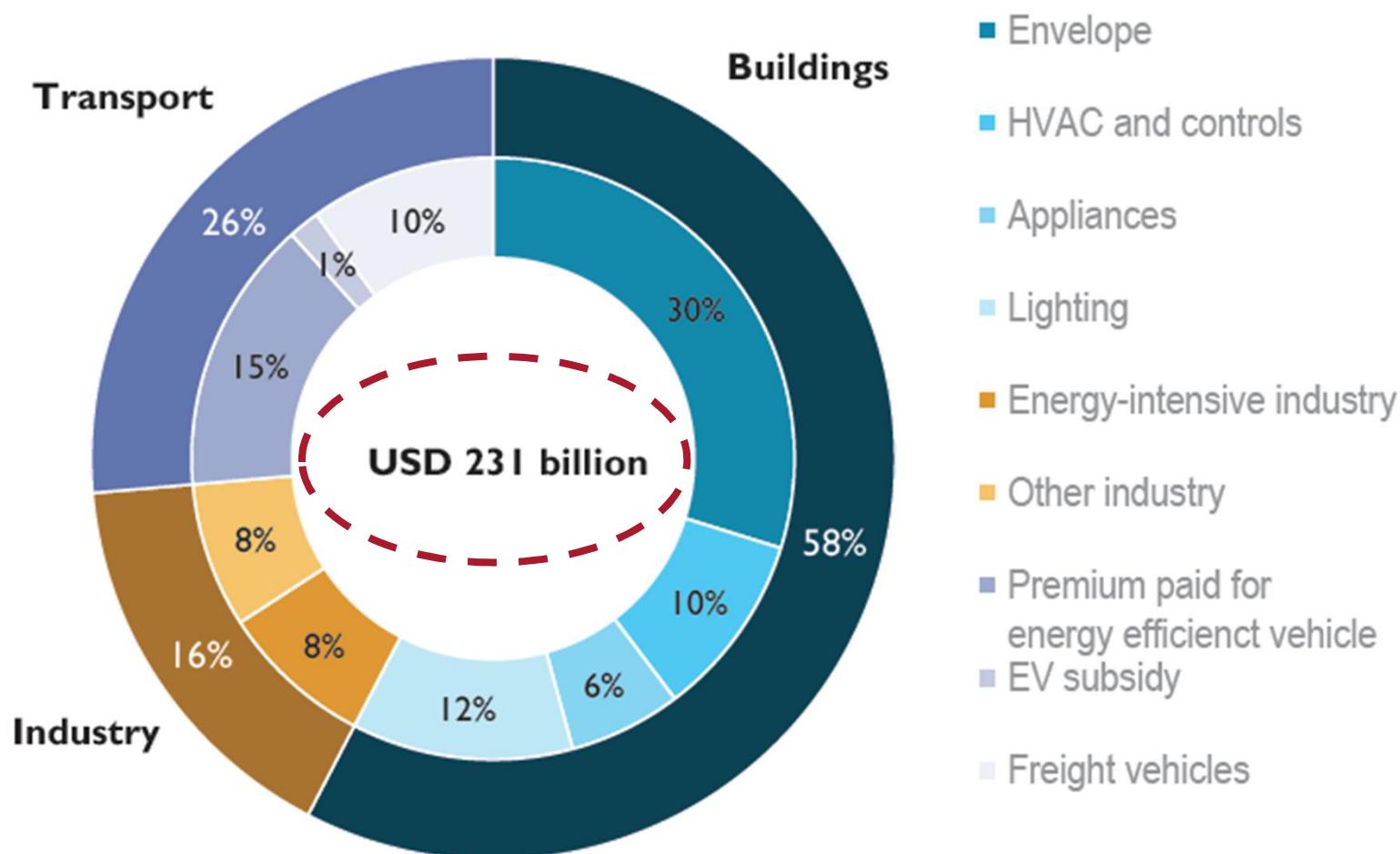
Jan W. Bleyl, Energetic Solutions & Task 16
Tunis, Tunisia, 29 November 2017

“First fuel”: Avoided energy use through Energy Efficiency (11 IEA countries 2013)



Source: [IEA 2013, p.20]

IEA: Energy efficiency investment by sector in 2016



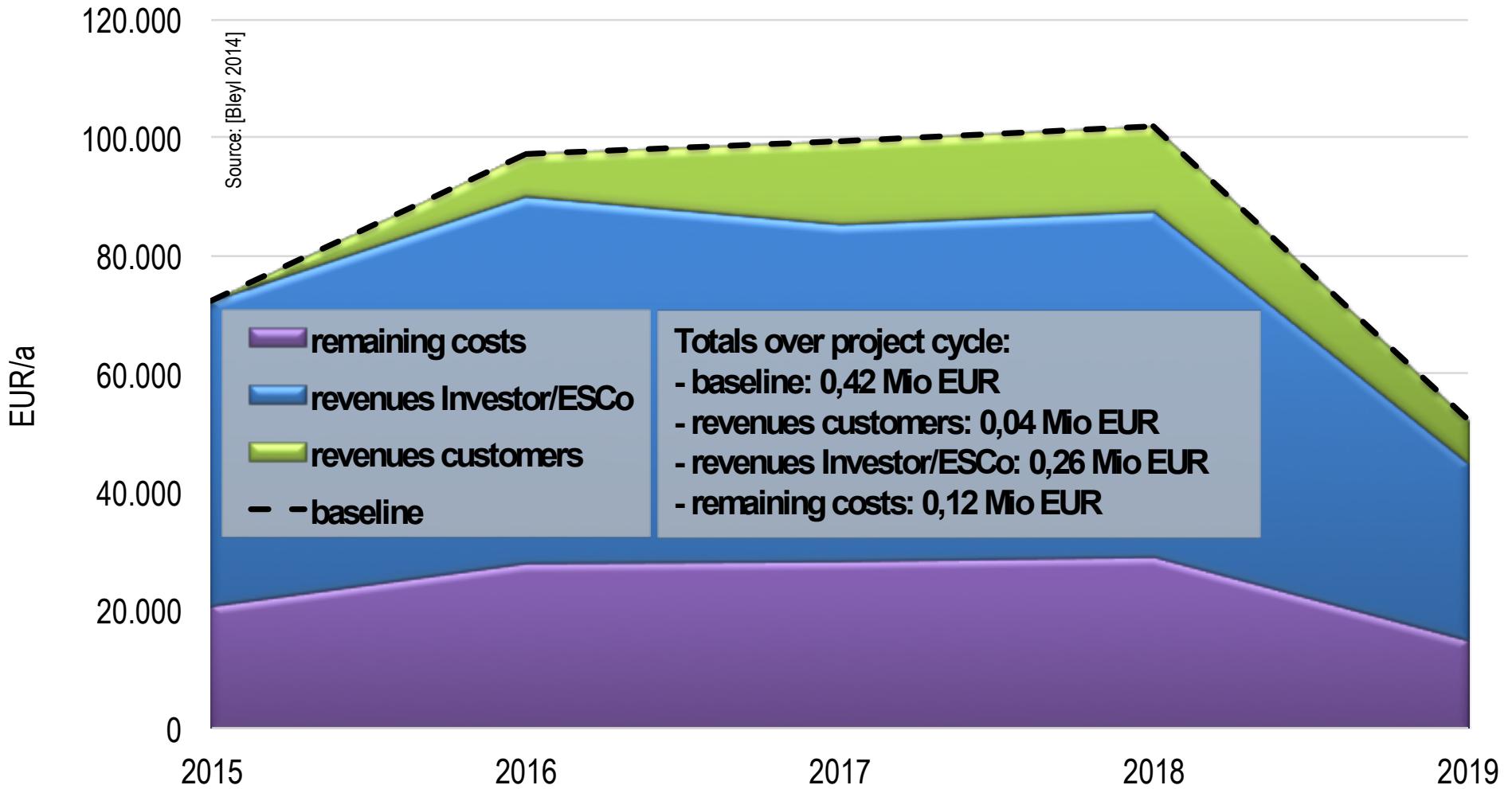
Source: [IEA 2017, p. 92]

Industrial re-lighting project:
Technical & economic analyses

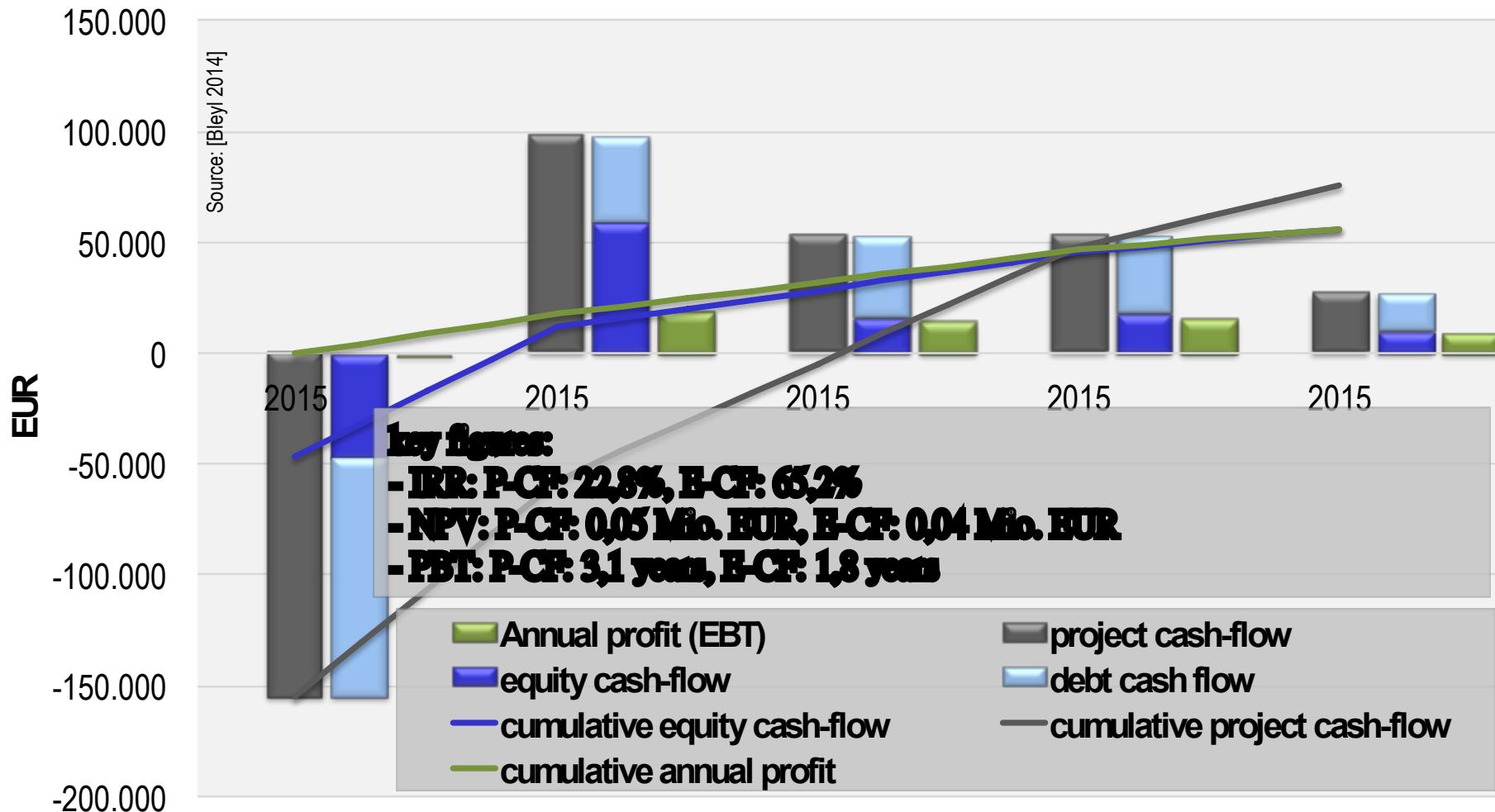
Case study: Industrial Re-lighting



Baseline, revenues client, ESCo and cost after savings measure



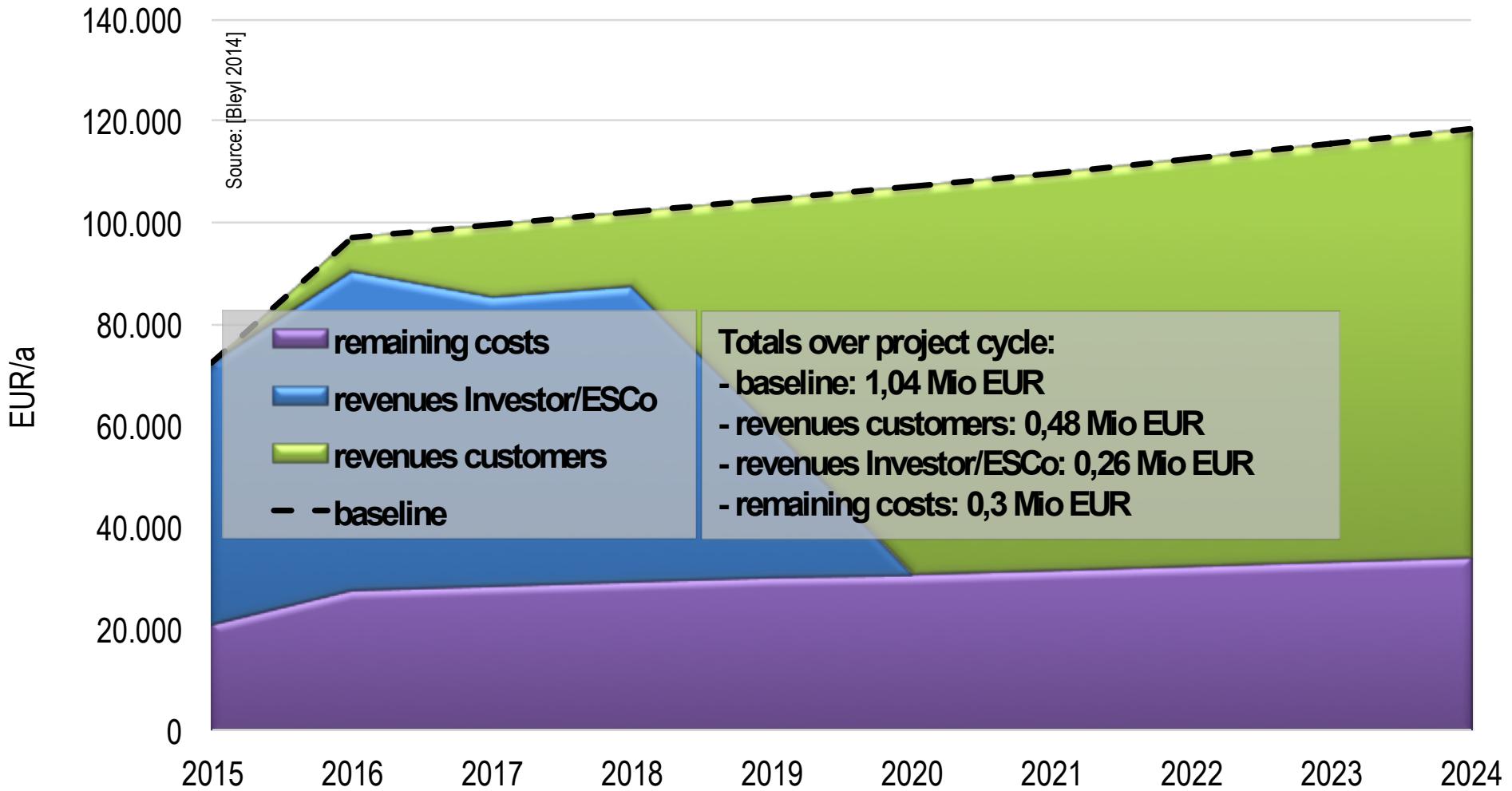
Dynamic investment appraisal: Net Cash Flows & Profits (annual+accumulated)



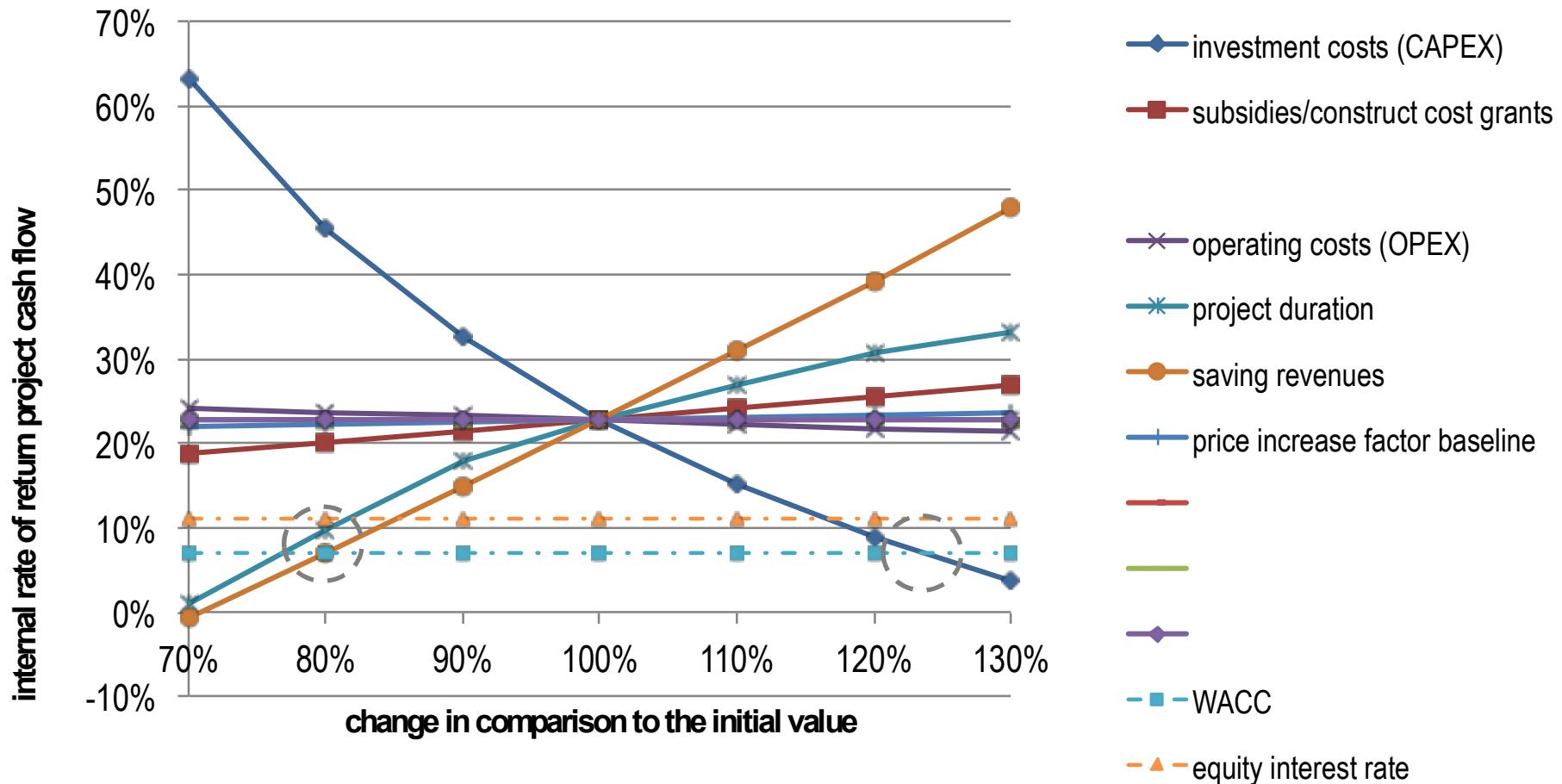
Dynamic investment appraisal: Summary and KPIs

		project cash-flow	equity cash-flow
project duration	years	4,5	
total investment	EUR	198.500	
invested equity	EUR	-	49.625
invested debt capital	EUR	-	148.875
interest rate for discounting	%	7,3% (WACC)	11% (equity interest rate)
net present value	EUR	45.809	39.413
internal rate of return (IRR)	%	22,8%	63,6%
payback period (dynamic)	years	3,1	1,8
Loan Life Cover Ratio	-	1,4	-

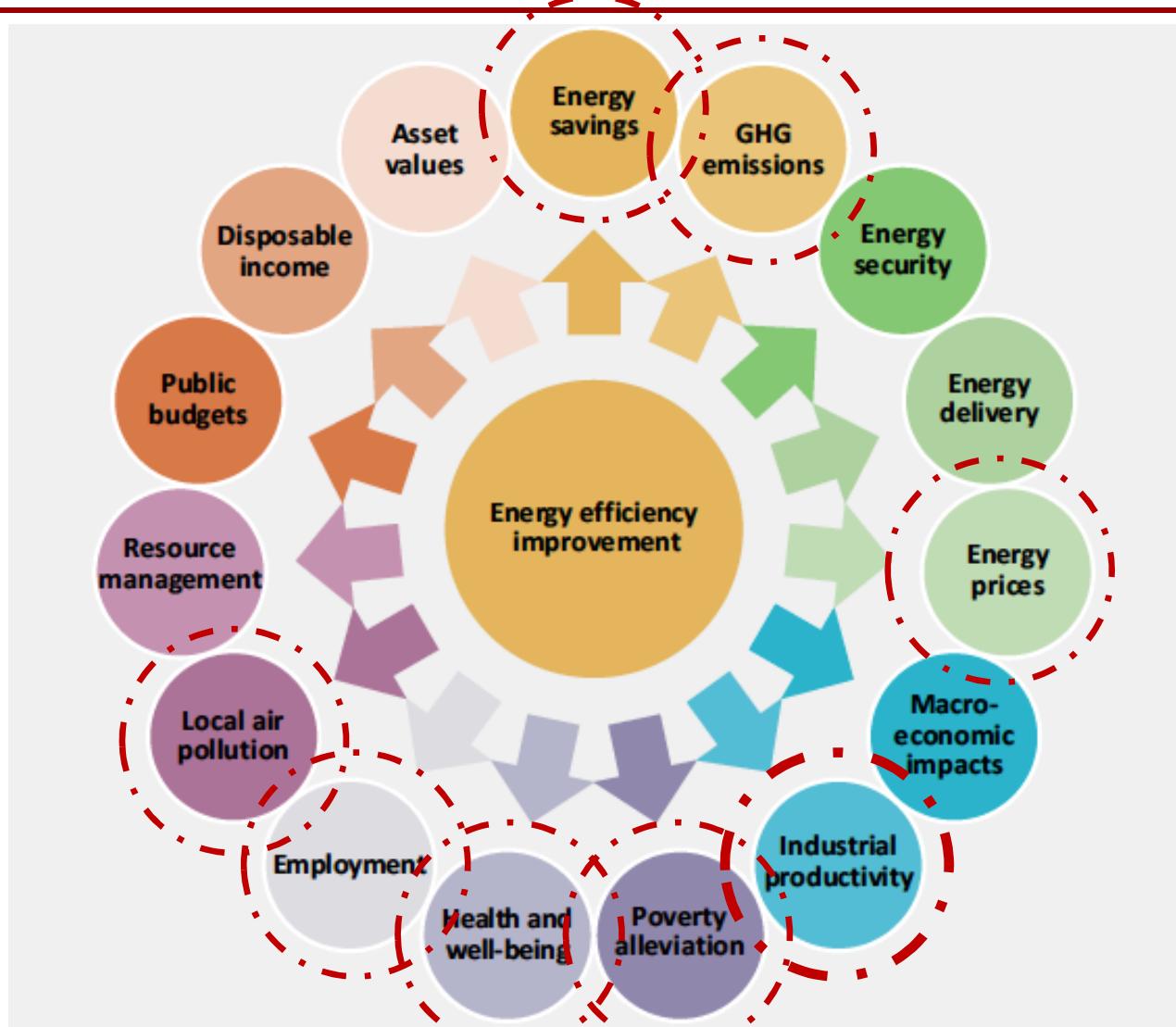
Baseline and clients share of savings during and after contract over 10 years



IRR Sensitivity analyses (deviation in %)



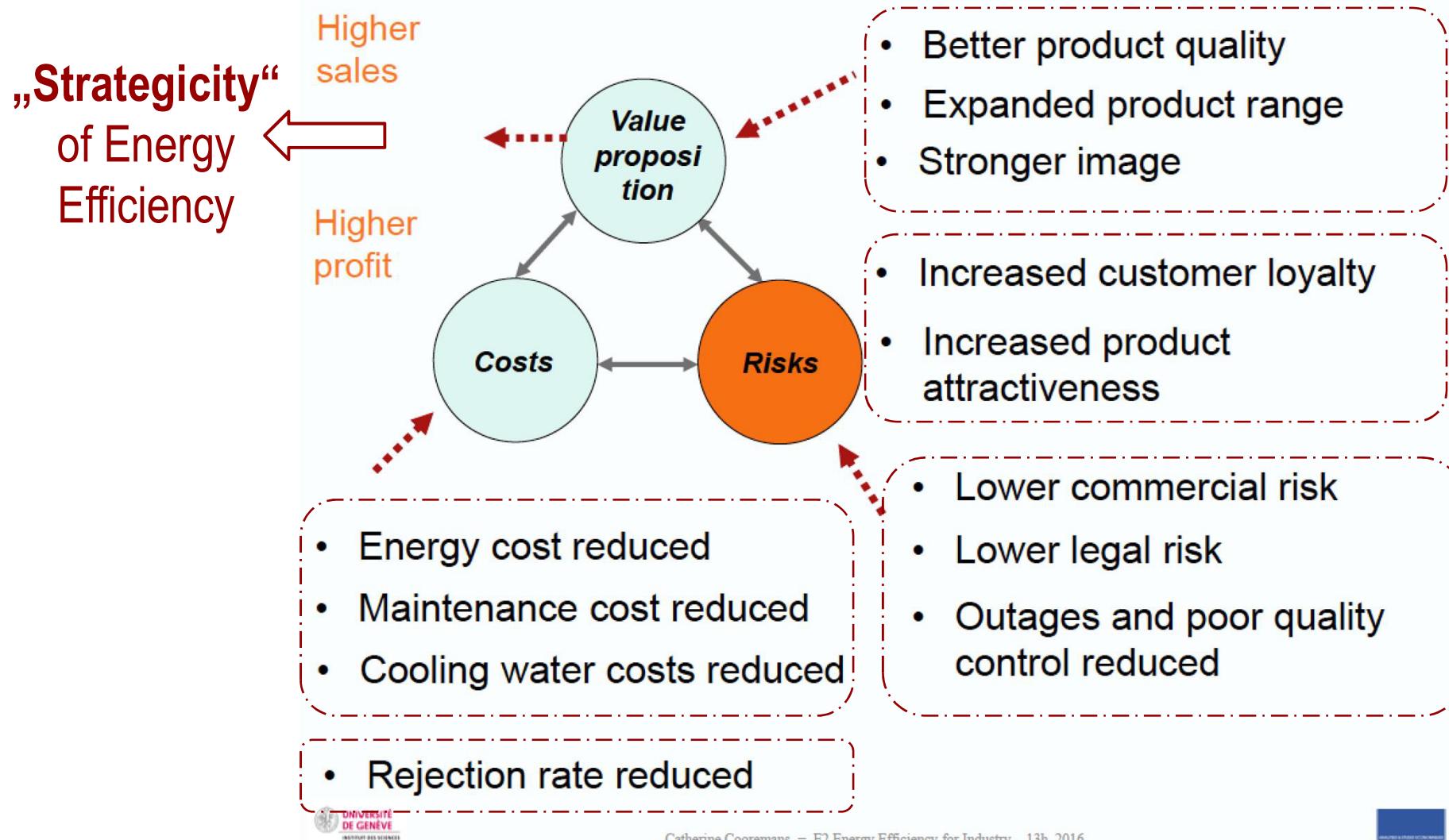
The Multiple Benefits of Energy Efficiency => Strategic partnerships? (IEA 2014)



Source: [IEA 2014]

Case Study: New Rectifier for galvanizing

=> Multiple Benefits: Cost , quality ...



Merci de votre attention!
**Questions et remarques
bienvenues!**
**Que pourrions-nous faire
ensemble?**

Get in touch:
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