

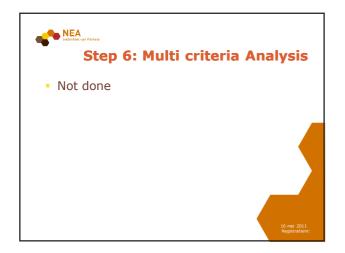
## NEA onderdeel van Panteia

## **Step 4: Financial Analysis**

- Learning effects
- Increased capacity network
- Investment and maintenance
- Reserve capacity
- Benefits









Result	s – GE -	- Project alt	ernative 1
Cost wind energy	12313	CO2	349
Costs biomass	1342	Other Benefits	6573
Total	13655	Total	6921
Balance business case	-6733		
		NOx	512
		SO2	91
Nature	Pm	PM10	121
Landscape	Pm	Indirect	Pm
Total costs	13655	Total benefits	7645
Balance	-6010		

Total financial costs 13660, Total financial benefits 6920	Balance business case -6730 External benefits 720 NPV 6010 (P.A.1)		
Variant	P.A.1	P.A.2	P.A.3
Basis	-6010	-4410	-3420
Learning +10%	-5000	-3740	-2720
Investment +10%	-6770	-4920	-3900
Benefits 6%	-5060	-3410	-2600
Benefits+Learning	-4050	-2740	-1900
Higher CO2 rights			
Higher CO2, lower investment			
Higher CO2, benefits 6			



Results – SE – Project alternative 3			
6% and high learning			
Cost wind energy	6894	CO2	2413
Costs biomass	1204	Other Benefits	6304
Total	8098	Total	8717
Balance business case	-619	NOx/SO2/PM10	384
Nature	Pm		
Landscape	Pm	Indirect	Pm
Total costs	8098	Total benefits	9101
Balance	+1003		



Total financial costs 13660, Total financial benefits 6920	Balance business case -6730 External benefits 720 NPV 6010 (P.A.1)		
Variant	P.A.1	P.A.2	P.A.3
Basis	-3000	-2540	-950
Learning +10%	-1770	-1600	-120
Investment +10%	-3700	-3060	-1400
Benefits 6%	-1660	-1270	+170
Benefits+Learning	-430	-330	+1000
Higher CO2 rights	-2450	-1970	-540
Higher CO2, lower investment	-1220	-1030	+290
Higher CO2, benefits 6	-1060	-650	+610





## Conclusions - 2 CBA Reserve capacity is not a bottleneck Possibly low impact on nature Wind energy at sea financial better than biomass at coal installations



