

Life+ Elia-RTE sustainable corridor management continued afterwards (Life2)

NRDC webinar Sustainable corridors June 19th 2020







## Overhead lines (OHL) in forests and N2000



Transmission System Operators : Elia (Belgium), RTE (France)

OHL through forests and N2000 areas (bird-, habitat-EU Directives)

TSOs nearly never own the land under OHL

Always in a multi-partner approach with the aim to improve biodiversity

Always in respect of security of supply and safety



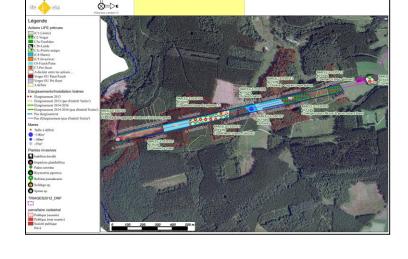


Fullfilling a societal mission: corridors help in halting biodiversity loss (instead of seeing them as no man's land)

## Life Elia - RTE – 7 phases

- a. Cartography (vegetation)
- b. Agreements with local stakeholders
- **c.** Implementation : tender, realization, control
- d. Management plan: objectives, maintenance
- e. Management of the corridor





- f. Biological indicators
- g. Communication



## Life+ Elia-RTE – Cost Benefit Analysis (CBA)



### Cost per hectare based on realities of Life+ Elia-RTE (in €)

Powering a world in progress

(last cut-down before new management installed not included) (subsidies of EU not taken in deduction)

Per hectare in corrido	<u>r - base</u>	d on cost of L	<u>ite+ Elia-F</u>	<u>IIE</u>															
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		cost '18 - '32
classical managemen	t		0	0	1500	0	0	1500	0	0	1500	0	0	1500	0	0	1500		7.500,00
	part in projec t surfac e		cost of installi															maintenance cost '19 - '32	
forest edge - restore	135	297,00	924	0	300	0	0	300	0	0	300	0	0	300	0	0	620	1820	585,00
forest edge - plant	113	416,75	1549			0	-		0	0	300	0	0		_	-		2252	
grazing - cows, horse	44	234,77	2241			0	160		0	0	0	160	0			-	2241	2561	
grazing - sheep	15	209,71	5872		-	-		-	-	0	-	160	0	-	-	-	5872	6192	
meadow	35	257,33	3088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	
nature - heath	58	183,80	1331	0	0	0	0	0	0	0	0	0	500	0	0	0	0	500	69,05
nature - peat	20	167,29	3513	0	0	0	0	0	0	0	0	0	500	0	0	0	0	500	23,81
	420	mean cost of installing		-216	684	0	-320	900	0	0	900	-320	-1000	900	0	0	-7853		mean maintenan ce cost 1.773,19
	420	1.700,00		-210	004	U	-320	900	U	U	300	-320	-1000	900	U	U	-7033	profit :	·

In short: over a period of 15 years, the mean cost of classic maintenance (cutting anything that grows every 3 years) is more costly than this sustainable management (taking in account the different actions distributed as done in the Life+ Elia-RTE project).

## Life2 as seen by Elia



## Cost for Life2 based on realities of Life+ Elia-RTE works (in €)

(final cut-down before new management not included) (no subsidies)

cost personnel (including everything), daily:			€ 400,00							
Cost works per hectare (based on CBA):			€ 1.766,66							
Profit in comparison on cutting, per hectare, o	€ 5.726,81									
			actual tariff p	<u>eriod</u>		next tariff po	eriod_			
	FTE / y	ha/y	2017	2018	2019	2020	2021	2022	 2030	total
Cost operational estimated										
After-Life du Life Elia actuel	1	-	en Life Elia	88.000	88.000	88.000	88.000	88.000		€ 440.000,00
cartography	0,25	-	22.000	22.000	22.000	22.000	22.000	-		€ 110.000,00
agreement, tender, control, follow-up	3	-	-	264.000	264.000	264.000	264.000	264.000		€ 1.320.000,00
realisations, annual	-	75	-	132.500	132.500	132.500	132.500	132.500		€ 662.497,50
			22.000	506.500	506.500	506.500	506.500	484.500		€ 2.532.497,50
_		425								
other estimated costs :										
Projets : réalisations Life 2 en couloirs	-	10	-	17.667	17.667	17.667	17.667	17.667		€ 88.333,00
Bio-indicators Life 2 (and Life 1)	0,4	-	in Life Elia	35.200	35.200	35.200	35.200	35.200		€ 176.000,00
Com : communications Life 2 (and Life 1)	0,25	-	in Life Elia	22.000	22.000	22.000	22.000	22.000		€ 110.000,00

# Elia's own "Life2": what, why



- Realize around 420 hectares according to the current Life-Elia principles
- React positively to propositions to participate in other stretches
- Continue in Wallonia, start in Flanders
- For five years : 1/2018 12/2022
- No subsidies anymore

#### Arguments on which the decision was based

- <u>Positive image</u>: better relations with authorities, with local communities near OHL, better acceptation of OHL (and future projects)
- Improved <u>security of overhead lines</u> (reduced risk due to vegetation staying lower)
- Internal training of patrollers, improved <u>competencies</u> in relation to vegetation, becoming <u>proud</u> to be on the job
- ROI: 3 to 13 years (with WACC of 5 %)

#### "Life 2", financial elements (2018 – 2022)

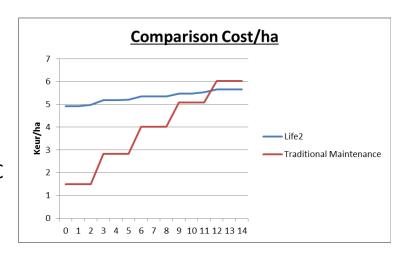
(After-Life: 0,4 M€; mandatory)

New realizations under lines: 0,7 M€

Expertise (cartography, conventioning, mgmt): 1,4 M€

Follow-up of bio-indicators: 0,2 M€

Communication: 0,1 M€



## Acceptance of OHL in EU context



**GD** Energy

**GD Environment** 

30% of energy from green sources - 2030

Natura 2000 network for biodiversity

Creation of networks
Renovation of networks

LIFE Elia-RTE

electrical safety and biodiversity

### Doubling a 30 km 380 kV OHL Maaseik - Zutendaal





Others picked up the Life Elia-RTE ideas: Flemish Nature Administration (re-create original biotope of heath)

Corridor of 18 km length and 65 m wide (117 ha)

Management plan: 26 years

200 - 400 sheep grazing instead of regular elimination of all growth

Agreement with 130 owners (100 k€ +) 50 k€ / year

