

### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 01- Air quality



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Client. Vientos Neuquinos I S.A.

Impact N° 01.01	Subfactor Air quality
CONSTRUCTION	STAGE
Absolute percentage of affectation	9.62 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Operation of electric generator equipment Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area Internal and access roads to the Project Rural Post (sporadic occupancy)
Impacts.	Diffused emissions of particulate material (airborne dust generation) Diffused emissions of combustion gases (greenhouse effect)
Description of impacts	Diffuse emissions of particulate materials will be generated: During summer months, soil dryness and winds will increase airborne dust ( natural soil wind-blow) and the sight might be hindered together with the inhalation of particulate material. The modification of the Air Quality will be potentially perceived only by rural homes, workers and passers-by. Diffused emissions of combustion gases (greenhouse effect) will be very low and will be rapidly diluted by the winds in the area. However, its cumulative affectation will enhance the ozone layer.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Placement of road sins (circulation maximum speed) Moisten internal roads in winter Conduct Vehicle Technical Test to all the vehicles. Call off all tasks during days with strong winds.
Description of	It is advisable to conduct an Air Quality Study in the work environment
Priority	
Expected Effectiveness	Medium

	Environmental Wind Energy I Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 01- Air quality					
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14				
Author Scude	ati & Asociados S.R.L		www.scudelati.com.ar				

Impact N° 01.02	Subfactor Air quality
CONSTRUCTION	OPERATION AND MAINTENANCE
Affectation Absolute percentage	4.37 %
Impacting Actions	Circulation and operation of vehicles wind energy generation process
Location.	Project Area
Impacts.	Diffused emissions of particulate material (airborne dust generation) Diffused emissions of combustion gases (greenhouse effect) Generation of noise. The reduction in the greenhouse effect (GEI) by wind energy
Description of impacts	Diffuse emissions of particulate material by vehicle circulation and operation. Given the low quantity of vehicles used during maintenance tasks, these will be of little importance. Diffuse emissions Greenhouse effect gases will be very low (despicable) due to little vehicle circulation. As a compensation for negative affectation, there will be generated a positive affectation of the sub factor. Wind Energy Park operation will reduce the generation of GEI due to the use of renewable sources of energy.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply

	Environmental Wind Energy I Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 01- Air quality						
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14					
Author Scude	ati & Asociados S.R.L		www.scudelati.com.ar					

Impact N° 01.03	Subfactor Air quality
CONSTRUCTION	DEPARTURE
Affectation Absolute percentage	12.40 %
Impacting Actions	Circulation and operation of vehicles Inadequate waste management Wind energy generation use Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area Internal and access roads to the Project Rural Post (sporadic occupancy)
Impacts.	Diffused emissions of particulate material (airborne dust generation) Diffused emissions of combustion gases (greenhouse effect)
Description of impacts	During work activities there will be diffuse emissions of particulate material Diffuse emissions of combustion gases are originated by the circulation and operation of vehicles. They will be very low and rapidly diluted by winds. The culmination of the Wind Energy Park operation will affect the energetic matrix which may be replaced by other sources of non- renewable energy increasing the GEI generation with a negative impact over the sub factor.
	Preventing and Mitigation Measures
Description of Prevention Measures	Placement of road signs (circulation maximum speed) Moisten internal roads in winter Conduct Vehicle Technical Test to all the vehicles. Call off all tasks during days with strong winds.
Description of Mitigation Measures	It is advisable to conduct an Air Quality Study in the work environment (identification of Particulate Material PM10)
Expected Effectiveness	Medium

	Environmental Wind Energy Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 01- Air quality					
Client. Vientos	Neuquinos I S.A.		EIA PEBC 001/14				
Author Scudel	ati & Asociados S.R.L		www.scudelati.com.ar				

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е			c		e	ility		ation		ť	bility
ortan		nsity	nsio	lent	isten	ersibi	ergy	nmul	t	odici	overa
Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Rec
-28	-1	2	2	4	1	1	1	1	4	2	4
-22	-1	1	1	4	1	1	1	1	4	4	1
-19	-1	1	1	4	1	1	1	1	4	1	1
-19	-1	1	1	4	1	1	1	1	4	1	1
-27	-1	2	2	4	1	1	1	1	4	1	4
0											
-14	-1	1	1	2	1	1	1	1	1	1	1
0											
	<ul> <li>-28</li> <li>-28</li> <li>-22</li> <li>-19</li> <li>-19</li> <li>-27</li> <li>0</li> <li>-14</li> <li>0</li> </ul>	<ul> <li>-28</li> <li>-1</li> <li>-22</li> <li>-1</li> <li>-19</li> <li>-1</li> <li>-19</li> <li>-1</li> <li>-19</li> <li>-1</li> <li>-27</li> <li>-1</li> <li>0</li> <li>-14</li> <li>-1</li> <li>0</li> </ul>	Importance         Importance           -28         -1         2           -28         -1         1           -28         -1         1           -29         -1         1           -19         -1         1           -19         -1         1           -19         -1         1           -10         -1         1           -10         -1         1           -10         -1         1           0         -1         1           0         -1         1	L         L <thl< th=""> <thl< th=""> <thl< th=""> <thl< th=""></thl<></thl<></thl<></thl<>	Image: boot state         Image: boot state	Image: boot state         Image: boot state	-       -	Image: second	Horizon       Horizon	Image: second	Image: second conduction       Image: second conduction       Image: second conduction       Image: second conduction         0       1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1       1         1

System	Physical Natural									_			,
Mediu	Inert	се			c		eo	ility		ation		ty	ability
Factor	Air	ortan		Isity	nsio	lent	ister	ersib	ergy	Inmr	t	odici	overa
Subfactor	Quality of air	Impo	Sign	Inter	Exte	Morr	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation and operation of vehicles		-16	-1	1	1	4	1	1	1	1	1	1	1
Presence of permanent facilities.		0											
Operation of the wind energy turbines		0											
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		47	1	4	4	4	4	4	2	4	4	4	1

Individual Affectation Matrix Operation and Maintenance Stage

	Environmental Wind Energy F Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 01- Air quality						
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14					
Author Scude	ati & Asociados S.R.L		www.scudelati.com.ar					

System	Physical Natural												
Mediu m:	Inert	0					a	ťy		ion			ility
Factor	Air	rtance		sity	sion	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Quality of air	Impo	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation and operation of vehicles		-22	-1	1	1	4	1	1	1	1	4	4	1
Filling, level	ing and scarification process.	0											
Inadequate	vaste management	-14	-1	1	1	2	1	1	1	1	1	1	1
WIND ENERGY GENERATION PROCESS		-47	-1	4	4	4	4	4	2	4	4	4	1
Demolition/withdrawal of foundations and permanent installations.		-25	-1	2	2	4	1	1	1	1	4	1	2
Unemployment		0											



#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 02 Surface water



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Client. Vientos Neuquinos I S.A.

Impact N° 02.01	Subfactor Surface water
CONSTRUCTION	STAGE
Affectation Absolute percentage	0.67%
Impacting Actions	Filling, leveling, scarification activity and re planting. Soil Movement Inadequate waste management
Location.	Runoffs
Impacts.	Modifications in the drainage patterns of temporary water courses (runoffs)
Description of impacts	If a modification in the drainage pattern of temporary water courses(runoffs) happens by inadequate road construction and/or facility placements, water erosion processes that degrade the soil may be generated. As long as soil movement generates these situations, the impact probability over the surface runoff will be boosted. Other construction element to consider are the trenches for wiring inside the Wind Park. If trenches for wiring remain open for long time, they will constitute a channeling way of surface runoff, modifying drainage patterns and favoring water erosion processes. Inadequate waste management caused by its chemical modification might generate affectation over the sub factor. Given the temporal nature of water courses such potential affectation will remain in its bed and it is unlikely that may reach a course and/or permanent surface water reservoir.
	Preventing and Mitigation Measures.
Description of Prevention Measures	There must be an adequate road and drainage construction plan to avoid runoff affectation and temporary or permanent water accumulation. It must be developed a quick close of trenches for wiring. Implement a Waste Management Program
Description of Mitigation Measures	After heavy rain visual inspections should be done to determine temporary water courses drainage and in a way to take the necessary compensation measures.
Priority	Low
Expected Effectiveness	Medium



Impact N° 02.02	Subfactor Surface water
CONSTRUCTION	DEPARTURE
Affectation Absolute percentage	1.26 %
Impacting Actions	Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Runoffs
Impacts.	Modifications in the drainage patterns of temporary water courses (runoffs)
Description of impacts	Moving away underground electric lines and foundations may favor the negative affectation of the sub factor by the modification in runoff drainage patterns. This situation will be compensated by filling, leveling and scarification activities planned by the Company. Inadequate waste management caused by its chemical modification might generate affectation over the sub factor. Given the temporal nature of water courses such potential affectation will remain in its bed and it is unlikely that may reach a course and/or permanent surface water reservoir.
	Preventing and Mitigation Measures.
Description of	Implement a Waste Management Program
Prevention Measures	
Description of	None
Mitigation Measures	
Priority	Low
Expected Effectiveness	Medium

System	Physical Natural												
Mediu	Inert	e			۲		eo	ility		ation		ť	bility
Factor	Water	ortan		sity	nsiol	lent	isten	ersibi	ergy	Inmr	t	odicit	overa
Subfactor	Surface water	lmpo	Sign	Inter	Exte	Мот	Pers	Reve	Syne	Accı	Effe	Perio	Reco
Soil Movement		-20	-1	2	2	2	2	1	1	1	1	1	1
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Constructior	of permanent facilities.	25	1	2	2	4	1	1	1	1	4	1	2
Grubbing an	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		-14	-1	1	1	2	1	1	1	1	1	1	1
Soil Compac	ting	0											

///	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 02 Surface water					Vientos Neuquinos							
Client. Vientos Neuquinos I S.A.											EIA F	PEBC	001/14
Author Scudelati & Asociados S.R.L www.scudelati.com.ar													
System	Physical Natural												
Mediu m <sup>.</sup>	Inert						đ	ţ		ion			ility
Factor	Water	rtance		sity	Ision	ent	stence	rsibili	rgy	mulat		dicity	verab
Subfactor	Surface water	Impol	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco

2

1

2

1

1

-1

0

0

25

-14

0

0

0

4

2

1

1

1

1

Dismantling of the wind turbines.

Inadequate waste management

permanent installations.

Unemployment

Circulation and operation of vehicles

Filling, leveling and scarification process.

WIND ENERGY GENERATION PROCESS

Demolition/withdrawal of foundations and

Individual Affectation Matrix Departure Stage

1

1

2

1

4

1

1

1

1

1





Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

Impact N° 03.01	Subfactor Underground water
CONSTRUCTION	STAGE
Affectation Absolute percentage	1.04 %
Impacting Actions	Inadequate waste management
Location.	Project Area
Impacts.	Chemical and physical modification of the underground water resource
Description of impacts	Chemical modification of the underground water resource might be due to the filtration of incorrectly disposed solids, semi-solids and liquids to the phreatic layer.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Have a Temporal Waste Management Site adequately built. Adequate waste management training for the personnel. Monitor sewage effluents daily.
Description of Mitigation Measures	None
Priority	Low
Expected Effectiveness	Medium

System	Physical Natural												,
Medium:	Inert	се			ſ		ce	ility		ation		ty	bility
Factor	Water	ortan		nsity	Extensio	Moment	Persisten	Reversibi	Synergy	umula	ct	odici	overa
Subfactor	Underground water	Impo	Sigr	Inter						Acci	Effe	Peric	Recc
Soil Movement		0											
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		-14	-1	1	1	2	1	1	1	1	1	1	1
Soil Compac	ting	0											



### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 04-Topography



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Client. Vientos Neuquinos I S.A.

Impact N° 04.01	Subfactor Topography
CONSTRUCTION	STAGE
Absolute percentage of affectation	2.09 %
Impacting Actions	Soil Movement Filling, leveling, scarification activity and re planting. Construction of permanent facilities.
Location.	Project area destined to the storage of materials and supplies; crane work platforms; wind energy foundations; roads; trenches for wiring; drainage and embankments; temporal and permanent facilities. Wiring Sector within the Wind Energy Park.
Impacts.	Modification of topographic characteristics. Modifications in the drainage patterns of temporary water courses (runoffs)
Description of impacts	Topographic characteristics will be modified by soil movement tasks. The filling, leveling and scarification tasks to be done when the work is finished mostly for the negative affectations over the factor.
	Prevention and Mitigation Measures
Description of Prevention Measures	There must be an adequate planning of drainage construction. The construction of internal roads, must be done trying to reduce alterations in topography and geographical relief.
Description of Mitigation Measures	After heavy rain visual inspections should be done to determine temporary water courses drainage and in a way to take the necessary compensatory measures.
Priority	Medium
Expected Effectiveness	Medium

Impact N° 04.02	Subfactor Topography					
STAGE	DEPARTURE					
Absolute percentage of affectation over	0.80 %					
Impacting Actions	Filling, leveling and scarification process. Demolition/withdrawal of foundations and permanent installations.					
Location.	Project Area					
Impacts.	Reconstitution of geoforms					
Description of impacts	The reconstruction of geoforms due to filling, leveling and scarification tasks, and to the withdrawal of facilities of the different affected areas.					
	Prevention and Mitigation Measures					
Description of Prevention Measures	Does not apply					
Description of Mitigation Measures	Does not apply					
Priority	Does not apply					
Expected Effectiveness	Does not apply					

	Environmental lı Wind Energy P Neuquinos I A	Environmental Impact Study Wind Energy Park Vientos Neuquinos I Addendum				
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14			
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar			

System	ystem Physical Natural												
Mediu	Inert	e			c		e	ility		ation		ť	bility
Factor	Soil	ortan		nsity	nsio	lent	isten	ersib	ergy	nmul	t	odici	overa
Subfactor	Topography	Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Perio	Recc
Soil Movement		-33	-1	1	4	2	4	4	1	1	4	4	2
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Construction	of permanent facilities.	-24	-1	1	1	2	4	4	1	1	1	4	2
Grubbing an	d clearance of the site	0											
Filling, leveling and scarification process.		29	1	1	2	2	4	1	1	4	4	4	2
Inadequate waste management		0											
Soil Compacting		0											
			~			~							

System	Physical Natural												
Mediu m <sup>.</sup>	Inert						a	ť		ion			ility
Factor	Soil	rtance		sity	Ision	ent	stence	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Topography	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation and operation of vehicles		0											
Filling, level	ing and scarification process.	29	1	1	2	2	4	1	1	4	4	4	2
Inadequate v	waste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		-22	-1	1	1	2	4	4	1	1	1	2	2
Unemploym	ent	0											



### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 05 Soil Science



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Impact N° 05.01	Subfactor Soil Science
STAGE	CONSTRUCTION
Absolute percentage of affectation over	6.79 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Construction of permanent facilities. Grubbing and clearance of the site Filling, leveling, scarification and re planting activities. Inadequate waste management Soil Compacting
Location.	Project Area Internal and access roads to the Project
Impacts.	Modifications of the physical and chemical soil characteristics. Increase of erosive processes Elimination of the vegetal cover
Description of impacts	The chemical characteristics of the soil may be modified due to the potential affectation by hydro carbon affectations for contingencies during the work tasks or by inadequate waste and sewage effluent management with the subsequent dumping in the field. The physical characteristics of the soil may be modified due to soil movement tasks, filling, leveling, scarification and compacting tasks. Permanent facility constructions will imply the physical modification of soil spots during the period in which the Wind Energy Park is in function. The elimination of the vegetative cover by grubbing and clearance of the site might increase the erosion processes caused by water and rain which degrade the edaphic layer.
	Prevention and Mitigation Measures
Description of Prevention Measures	The proper conservation of rain drainage system must be performed. It must be developed a quick close-up of trenches for wiring and founding excavations Perform the sampling and analysis prior to the beginning of the Construction Stage at 50% execution of the work and at the end of it with the parameter identification as Total Petroleum Hydro carbon (HTP); lead, copper, zinc and chrome.
Description of Mitigation Measures Priority	There must be an adequate planning of road and drainage constructions. Once the wind energy turbines have been installed in the foundations, they will be fixed with a concrete grout and will be covered with the soil previously extracted (first the non-organic soil and the, if there exists, with the organic soil of edaphic selection, if it is possible to do that selection) Scarification must be done in the surrounding of each foundation. Monitor sewage effluents daily. The stored soil must be covered with a polyethylene of low density to avoid wind-blow Medium
Expected Effectiveness	Medium
Expected Effectiveness	Medium

	Environmental lı Wind Energy P Neuquinos I A	Environmental Impact Study Wind Energy Park Vientos Neuquinos I Addendum					
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14				
Author Scudel	lati & Asociados S.R.L		www.scudelati.com.ar				

Impact N° 05.02	Subfactor Soil Science
STAGE	DEPARTURE
Absolute percentage of affectation over	0.92 %
Impacting Actions	Filling, leveling, scarification and re planting activities. Inadequate waste management
Location.	Project Area Internal and access roads to the Project
Impacts.	Modifications of the physical and chemical soil characteristics. Restitution of the vegetative cover
Description of impacts	During the work activities there will be generated waste that might be inadequately stored and/or disposed. However, this negative affectation will be widely compensated by the filling, leveling, scarification and re planting activities with native species that will enable the restitution of the vegetative cover by the reestablishment of the soil surface horizon of the potentially affected areas.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Perform the sampling and analysis prior to the beginning of the Construction Stage at 50% execution of the work and at the end of it with the parameter identification as Total Petroleum Hydro carbon (HTP); lead, copper, zinc and chrome.
Description of Mitigation Measures	Monitor sewage effluents daily.
Priority	Medium
Expected Effectiveness	Medium

System	Physical Natural												
Mediu	Inert	e			۔		ce	ility		ation		ť	bility
Factor	Soil	ortan		isity	nsio	lent	isten	ersibi	ergy	lum	×	odicit	vera
Subfactor	Soil Science	Impo	Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effec	Perio	Reco
Soil Movement		-19	-1	1	2	2	2	2	1	1	1	1	2
Circulation and operation of vehicles		-22	-1	1	1	1	2	2	1	4	1	2	4
Operation of electric generator equipment		0											
Constructior	of permanent facilities.	-18	-1	1	2	1	2	2	1	1	1	1	2
Grubbing an	d clearance of the site	-22	-1	2	2	2	2	2	1	1	1	1	2
Filling, leveling and scarification process.		23	1	1	2	2	4	1	1	1	4	1	2
Inadequate waste management		-15	-1	1	1	2	1	1	1	1	1	1	2
Soil Compac	ting	-18	-1	1	2	1	2	2	1	1	1	1	2

	Environmental lı Wind Energy P Neuquinos I A	Environmental Impact Study Wind Energy Park Vientos Neuquinos I Addendum			
Client. Vientos Neuquinos I S.A.			EIA PEBC 001/14		
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar		

System	Physical Natural												
Mediu m <sup>.</sup>	Inert						a	Ę		ion			ility
Factor	Soil	rtance		sity	sion	ent	stence	rsibili	rgy	mulat	t.	dicity	verab
Subfactor	Soil Science	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling of the wind turbines.		0											
Circulation and operation of vehicles		0											
Filling, level	ing and scarification process.	23	1	1	2	2	4	1	1	1	4	1	2
Inadequate	waste management	-15	-1	1	1	2	1	1	1	1	1	1	2
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											



### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 06- Erosion



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Client. Vientos Neuquinos I S.A.

Impact N° 06.01	Subfactor Erosion
STAGE	CONSTRUCTION
Absolute percentage of affectation over	1.64 %
Impacting Actions	Soil Movement Grubbing and clearance of the site Filling, leveling, scarification and re planting activities.
Location.	Project Area Internal and access roads to the Project
Impacts.	Increase of erosive processes Elimination of the vegetal cover
Description of impacts	The elimination of the vegetative cover and soil movement by grubbing and clearance of the site might increase the erosion processes caused by water and rain which degrade the edaphic layer. The actions of filling, leveling, scarification and re planting with native species will affect the site in a positive way reducing and removing potential erosive processes.
	Preventing and Mitigation Measures.
Description of Prevention Measures	The proper conservation of rain drainage system must be performed. It must be developed a quick close-up of trenches for wiring and founding excavations
Description of Mitigation Measures	There must be an adequate planning of road and drainage constructions. Once the wind energy turbines have been installed in the foundations, they will be fixed with a concrete grout and will be covered with the soil previously extracted (first the non-organic soil and the, if there exists, with the organic soil of edaphic selection, if it is possible to do that selection) Scarification must be done in the surrounding of each foundation. The stored soil must be covered with a polyethylene of low density to avoid wind-blowing
Priority	High
Expected Effectiveness	Medium

	Environmental lı Wind Energy P Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 06- Erosion			
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14		
Author Scudelati & Asociados S.R.L			www.scudelati.com.ar		

Impact N° 06.02	Subfactor Erosion
STAGE	DEPARTURE
Absolute percentage of affectation over	0.23 %
Impacting Actions	Filling, leveling, scarification and re planting activities. Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area Internal and access roads to the Project
Impacts.	Modifications of the physical and chemical soil characteristics. Restitution of the vegetative cover
Description of impacts	Demolition work and withdrawal of permanent facilities and foundations imply the soil movement whose inadequate management have a negative impact in the soil erosion. Filling, leveling, scarification activities and re planting with native species will enable the restitution of the vegetative cover by the reestablishment of the soil surface horizon of the potentially affected areas avoiding erosive processes.
	Preventing and Mitigation Measures.
Description of Prevention Measures	It must be developed a quick close-up of trenches for wiring and founding excavations
Description of Mitigation Measures	Once the wind turbines, wires and foundations are withdrawn, excavations that contained them must be filled. Scarification must be done in the surrounding of each foundation. The stored soil must be covered with a polyethylene of low density to avoid wind-blowing
Priority	High
Expected Effectiveness	Medium

System	Physical Natural												
Mediu	Inert	се			۔		ce	ility		ation		ťy	bility
Factor	Soil	ortan		nsity	nsio	lent	isten	ersibi	ergy	Inmr	ct	odicit	overa
Subfactor	Erosion	lmpo	Sign	Inter	Exte	мом	Pers	Reve	Syne	Accı	Effe	Perio	Reco
Soil Movement		-27	-1	1	2	1	2	2	1	4	4	4	2
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	-24	-1	1	2	1	2	2	1	1	4	4	2
Filling, leveling and scarification process.		29	1	1	2	2	4	1	1	4	4	4	2
Inadequate waste management		0											
Soil Compac	ting	0											

	Environmental lı Wind Energy P Neuquinos I File	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 06- Erosion		
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14	
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System	Physical Natural												
Mediu m <sup>.</sup>	Inert						a	ť		ion			ility
Factor	Soil	rtance		sity	nsion	ent	stence	rsibili	rgy	mulat	t.	dicity	verab
Subfactor	Erosion	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling of the wind turbines.		0											
Circulation and operation of vehicles		0											
Filling, level	ing and scarification process.	23	1	1	2	2	4	1	1	1	4	1	2
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		-21	-1	2	2	1	2	2	1	1	1	1	2
Unemployment		0											

Individual Affectation Matrix Construction Stage





Client. Vientos Neuquinos I S.A.

Impact N° 07.01	Subfactor Restriction to the soil use.
CONSTRUCTION	STAGE
Affectation Absolute percentage	0.07 %
Impacting Actions	Construction of permanent facilities. Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	A) Modification for soil use.
Description of impacts	The area of the project is currently used for extensive farming which will suffer modification due to work activities and facility construction in the area of the project. Filling, leveling and scarification activities and re-planting will enable the soil in the place of wind energy turbines to recover the vegetative cover which may be used by extensive farming activities, compatible with the generation of wind energy.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Notify users in the area of the project (individuals that use the area for extensive farming activities) in advance of scheduled tasks. Place safety signs and posters near the sectors where tasks are developed warning about the work activity. Design procedures of entrance/circulation in the project area that indicate the obligation to have wooden gates and the maintenance of fencing for cattle raising to avoid cattle breakout. Loose cattle in the area of the project must be communicated to the owner of the site.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	High

.111	Environmental lı Wind Energy P Neuquir	Environmental Impact Study Wind Energy Park Vientos Neuquinos I		
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14	
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Impact N° 07.02	Subfactor Restriction to the soil use.
CONSTRUCTION	OPERATION AND MAINTENANCE
Affectation Absolute percentage	2.25 %
Impacting Actions	Presence of permanent facilities.
Location.	Project Area
Impacts.	A) Modification for soil use.
Description of impacts	The presence of permanent facilities (included roads) will modify slightly the soil use since they are compatible with the extensive faming activity developed in the area of the project.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Maintenance of perimeter fencing in the sectors of electric shock risks to avoid entry of livestock. Road signaling with maximum speed posters and warning about loose livestock in the area. Design procedures of entrance/circulation in the project area that indicate the obligation to have wooden gates and the maintenance of fencing for cattle raising to avoid livestock breakout. Loose cattle in the area of the project must be communicated to the owner of the site.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	High

Impact N° 07.03	Subfactor Restriction to the soil use.
CONSTRUCTION	DEPARTURE
Affectation Absolute percentage	6.66 %
Impacting Actions	Filling, leveling, scarification activity and re planting. Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	A) Modification for soil use.
Description of impacts	Demolition and withdrawal of foundations will modify the soil physical characteristics and its recovery to original conditions. Filling, leveling, scarification activities and re planting with native species will enable the restitution of the vegetative cover by the reestablishment of the soil surface horizon of the potentially affected areas and their recovery to original conditions.
	Preventing and Mitigation Measures
Description of Prevention Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply

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Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14
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System	Physical Natural												
Medium:	Inert	e			c		e	ility		ation		Ę	bility
Factor	Soil	ortan		nsity	nsio	lent	isten	ersibi	ergy	nmul	ct	odici	overa
Subfactor	Restrictions of use:	Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Reco
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	-30	-1	1	2	4	4	4	1	1	4	4	1
Grubbing and	d clearance of the site	0											
Filling, leveling and scarification process.		31	1	2	2	4	4	2	1	1	4	4	1
Inadequate waste management		0											
Soil Compacting		0											

System	Physical Natural												_
Medium:	Inert	се			L		eou	ility		ation		ty	ability
Factor	Soil	ortan	_	nsity	Insio	nent	ister	ersib	ergy	nmu	t	odici	overa
Subfactor	Soil Use	Impo	Sign	Inter	Exte	Morr	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	-16	-1	1	1	1	4	1	1	1	1	1	1
Operation (	of the wind energy turbines	0											
Inadequate	waste management	0											
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

	Environmental Impact Study Wind Energy Park Vientos Neuquinos I									1	Vier Neug	itos uinos		
Client. Viento:	s Neuquinos I S.A.	uquinos I S.A.								EIA PEBC 001/14				
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System	Physical Natural													

	,												
Mediu m <sup>.</sup>	Inert	0					e	ty		ion			ility
Factor	Soil	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Restrictions of use:	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, level	ing and scarification process.	28	1	1	2	4	4	2	1	1	4	4	1
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		30	1	1	2	4	4	4	1	1	4	4	1
Unemployment		0											
Unemployment		0											





Client. Vientos Neuquinos I S.A.

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Impact N° 08.01	Subfactor Herbaceous Stratum - Habitat quality
CONSTRUCTION	STAGE
Affectation Absolute percentage	1.04 %
Impacting Actions	Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	This negative affectation may be due to: - grubbing and clearance of the site; and the construction of permanent facilities that impact in the life of the species living in the affected sites. - inadequate waste management may generated spill of hydro carbon byproducts that might affect species. Al the end of the Construction Stage, activities of filling, leveling and scarification of the soil in the trenches , temporal roads and in the surroundings of the foundations, representing a positive affectation over the sub factor that will favor the re planting with native species.
	Preventing and Mitigation Measures.
Description of	Avoid unnecessary grubbing.
Prevention	There must be a waste management plan and a temporal waste dumping
Measures	site.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium

Impact N° 08.02	Subfactor Herbaceous Stratum - Habitat quality
STAGE	DEPARTURE
Affectation Absolute percentage	3.10 %
Impacting Actions	Filling, leveling, scarification activity and re planting. Inadequate waste management Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	Inadequate waste management during demolition tasks and the withdrawal of foundations may generate negative affectations similar to those in the Constructions Stage. Demolition/withdrawal of foundations and permanent facilities with the subsequent actions of filling, leveling, scarification and re planting with native species will enable the restoration of the vegetative cover by reestablishment of the affected stratum in the Construction Stage.
	Preventing and Mitigation Measures.
Description of Prevention Measures	There must be a waste management plan and a temporal waste dumping site.
Description of Mitigation Measures	None
Priority	Low
Expected Effectiveness	Medium

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	-	e	

#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 08 - Herbaceous Stratum - Habitat quality



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System	Physical Natural												
Mediu	Biotic						đ	Ž		ion			ility
Factor	Vegetation	ance		ity	sion	t	tence	sibili	λ	nulati		licity	erabi
Subfactor	Herbaceous Stratum (Habitat	Import	Sign	Intens	Extens	Mome	Persis	Revers	Synerç	Accum	Effect	Period	Recov
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	-18	-1	1	1	2	2	1	1	1	4	1	1
Filling, leveling and scarification process.		21	1	1	1	2	4	1	1	1	4	1	2
Inadequate waste management		-17	-1	1	2	2	1	1	1	1	1	2	1
Soil Compacting		0											

# Individual Affectation Matrix Construction Stage

System	Physical Natural												
Mediu m <sup>.</sup>	Biotic						e	ty		ion			ility
Factor	Vegetation	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Herbaceous Stratum (Habitat	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, level	ing and scarification process.	21	1	1	1	2	4	1	1	1	4	1	2
Inadequate v	waste management	-17	-1	1	2	2	1	1	1	1	1	2	1
	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		23	1	2	1	1	4	2	1	1	4	1	1
Unemployment		0											





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Impact N° STAGE

Impact N° 09.01	Subfactor Herbaceous Stratum -Biodiversity
STAGE	STAGE
Affectation Absolute percentage	0.15 %
Impacting Actions	Grubbing and clearance of the site Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	This negative affectation is generated by the grubbing and clearance of the site that might affect the biodiversity indicators of the area for the loss of any species in particular. Al the end of the Construction Stage, activities of filling, leveling and scarification of the soil in the trenches , temporal roads and in the surroundings of the foundations, representing a positive affectation over the sub factor that will favor the re planting with native species.

Preventing and Mitigation Measures.					
Description of					
Prevention	Avoid unnecessary grubbing.				
Measures					
Description of	Nono				
Mitigation Measures	NULE				
Priority	High				
Expected Effectiveness	Medium				

Impact N° 09.02	Subfactor Herbaceous Stratum -Biodiversity
STAGE	DEPARTURE
Affectation Absolute percentage	2.30 %
Impacting Actions	Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	Filling, leveling, scarification activities and re-planting with native species constitute a positive affectation over the sub factor given that they will enable the restitution of the vegetative cover by reestablishing the stratum affected in the Construction stage and the reconstitution of species potentially affected.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply

'//	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 09 - Herbaceous Stratum - Biodiversity Neuquinos I S.A.						tos Jinos						
Client. Vientos	Neuquinos I S.A.										EIA P	EBC (	001/14
Author Scudela	ati & Asociados S.R.L									WW	/w.scu	delati.	com.ar
System	Physical Natural												
Mediu	Biotic			ity				Reversibility	BV	nulation			lity
Factor	Vegetation	ance			sion	ŧ	tence					Periodicity	erabi
Subfactor	Herbaceous Stratum (Habitat	Import	Sign	Intens	Extens	Mome	Persis		Synerç	Accum	Effect		Recov
Soil Moveme	ent	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Constructior	n of permanent facilities.	0											
Grubbing and clearance of the site		-18	-1	1	1	1	2	2	1	1	4	1	1
Filling, leveling and scarification process.			1	1	1	1	4	1	1	1	1	1	1
Inadequate waste management													
Soil Compacting		0											

System	Physical Natural												
Mediu m·	Biotic						a	Ę		ion			ility
Factor	Vegetation	rtance		sity	Ision	ent	stence	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Herbaceous Stratum (Habitat Quality)	lmpo	Import Sign		Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation and operation of vehicles		0											
Filling, leveli	ng and scarification process.	20	1	1	1	1	4	2	1	1	4	1	1
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											



#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 10 - Herbaceous Stratum - Species in danger



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System	Physical Natural												
Mediu	Biotic						6	У		on			lity
Factor	Vegetation	ance		ty	ion	Ħ	ence	ibilit	Ŋ	ulati		icity	erabi
Subfactor	File 10 - Herbaceous Stratum - Species in	Import	Sign	Intensi	Extens	Momer	Persist	Revers	Synerç	Accum	Effect	Period	Recove
Soil Movement		0											
Circulation and operation of vehicles		0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		0											
Soil Compacting		0											

## Individual Affectation Matrix Construction Stage

System	Physical Natural												
Mediu	u Biotic r Vegetation						e	ity		tion		dicity	/erability
Factor				sity	sion	ant	stenc	lidis	Ŋ,	nula			
Outrantan	Bush Stratum	por	Ľ	sua	ten	ů.	rsi;	ver	ner	cul	ect	rio	ĉ
Subfactor	(Habitat Quality)	<u>m</u>	Siç	lnt	Ĕ	Мо	Pe	Re	Sy	Ac	Eff	Pe	Re
Circulation and operation of vehicles		0											
Presence o	of permanent facilities.	0											
Operation of the wind energy turbines		0											
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

Mediu Biotic m· Factor Vegetation	ø											
Factor Vegetation				Ę		е	ty		ion			verability
	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	
Subfactor Herbaceous Stratum - Species in danger	odwj	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling of the wind turbines.												
Circulation and operation of vehicles												
Filling, leveling and scarification process.	0											
Inadequate waste management	0											
Wind energy generation process												
Demolition/withdrawal of foundations and permanent installations.												
Unemployment												





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Client. Vientos Neuquinos I S.A.

Impact N° 11.01	Subfactor Herbaceous Stratum - Habitat quality
STAGE	CONSTRUCTION
Absolute % of Affectation over Subfactor	0.97 %
Impacting Actions	Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts.	This negative affectation may be due to: - site grubbing and clearing tasks; and the construction of permanent facilities that impact in the life of the species that life in the sites affected -inadequate waste management that may cause spills of hydro carbon byproducts that may affect species. At the end of the Construction Stage, soil filling, leveling and scarification will be done in trenches, temporary roads and the surroundings of foundations and facilities, representing a positive affectation over the sub factor that will favor re planting with indigenous species.
	Preventing and Mitigation Measures.
Description of preventing and Prevention.	Avoid unnecessary grubbing. There must be a waste management plan and a temporal temporary dumping site of waste.
Description of Mitigation measures	None
Priority	Medium
Expected Effectiveness	Medium

Impact N° 11.02	Subfactor Herbaceous Stratum - Habitat quality
STAGE	DEPARTURE
Absolute % of Affectation over Subfactor	5.17 %
Impacting Actions	Filling, leveling, scarification activity and re planting. Demolition/withdrawal of foundations and permanent facilities.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	Demolition/withdrawal of foundations and permanent facilities following the tasks of filling, leveling, scarification and re planting with native species that will affect in a positive way since the will enable the restitution of the vegetative cover by reestablishing the stratum affected in the Construction Stage
	Preventing and Mitigation Measures.
Description of Preventing measures	Does not apply
Description of Mitigation measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply



System Physical Natural												
Medium: Biotic							~					lity
Factor Vegetation	tance		ty	ion	,	ence	ibilit	<u>≻</u>			icity	erabil
Shrub layer Subfactor Habitat quality	Impor	Sign	Intensi	Extens	Momer	Persist	Revers	Synerg		Effect	Period	Recove
Soil Movement	0											
Circulation and operation of vehicles												
Operation of electric generator equipment												
Construction of permanent facilities.	0											
Grubbing and clearance of the site	-18	-1	1	1	2	2	1	1	1	4	1	1
Filling, leveling and scarification process.		1	1	1	2	4	1	1	1	4	1	2
Inadequate waste management		-1	1	1	4	1	1	1	1	1	1	1
Soil Compacting												

System Subfactor Medium: Factor	Physical Natural Habitat quality Biotic Vegetation Shrub layer	ling on ans ens	Sign	htensky	Extensio	Moment	Persistence	Rowersistery	Synergy	Acomutatio n.	Effect	Pariodicity	Accordia 1
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, level	ing and scarification process.	21	1	1	1	2	4	1	1	1	4	1	2
Inadequate v	waste management	0											
Wind energy generation process		0											
Demolition/withdrawal of foundations and permanent facilities		24	1	2	1	4	1	2	1	1	1	4	2
Unemploym	ent	0											





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Client. Vientos Neuquinos I S.A.

Impact N° 12.01	Subfactor Bush Stratum - Biodiversity
STAGE	CONSTRUCTION
Affectation Absolute percentage	0.15 %
Impacting Actions	Grubbing and clearance of the site Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	This negative affectation is generated by the grubbing and clearance of the site that might affect the biodiversity indicators of the area for the loss of any species in particular. Al the end of the Construction Stage, activities of filling, leveling and scarification of the soil in the trenches , temporal roads and in the surroundings of the foundations, representing a positive affectation over the sub factor that will favor the re planting with native species.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Avoid unnecessary grubbing.
Description of Mitigation Measures	None
Priority	High
Expected Effectiveness	Medium

Impact N° 12.02	Subfactor Bush Stratum - Biodiversity
STAGE	DEPARTURE
Affectation Absolute percentage	2.30 %
Impacting Actions	Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	Herbaceous Stratum Affectation
Description of impacts	Filling, leveling, scarification activities and re-planting with native species constitute a positive affectation over the sub factor given that they will enable the restitution of the vegetative cover by reestablishing the stratum affected in the Construction stage and the reconstitution of species potentially affected.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply

	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 12 - Bush Stratum - Biodiversity									Vientos Neuquinos			
Client. Vientos	Neuquinos I S.A.										EIA P	EBC (	001/14
Author Scudela									ww	/w.scu	delati.	com.ar	
_													
System	Physical Natural												
Medium:	Biotic									n			ity
Factor	Vegetation	ance		ţ	ion	Ļ	ence	ibility	~	ulatio		city	erabil
Subfactor	Bush Stratum (Habitat Quality)	Importa	Sign	Intensi	Extens	Momen	Persist	Revers	Synerg	Accum	Effect	Periodi	Recove
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and clearance of the site		-18	-1	1	1	2	2	1	1	1	4	1	1
Filling, leveling and scarification process.		16	1	1	1	1	4	1	1	1	1	1	1
Inadequate waste management		0											
Soil Compacting		0											
			~			~							

System	Physical Natural												
Medium	Biotic	Ó					e	ťy		ion			ility
Factor	Vegetation	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Bush Stratum (Habitat Quality)	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	nd operation of vehicles	0											
Filling, leveli	ng and scarification process.	20	1	1	1	1	4	2	1	1	4	1	1
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											



#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 13 - Bush Stratum <u>-</u> Species in danger



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System	Physical Natural												
Mediu	Biotic									u			ity
Factor	Vegetation	nce		y	uo	t	ence	ibility	У	ulatic		city	rabil
Subfactor	Bush Stratum - Species in danger	Importa	Sign	Intensit	Extensi	Momen	Persiste	Reversi	Synerg	Accum	Effect	Periodi	Recove
Soil Movemer	nt	0											
Circulation and operation of vehicles		0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and	clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		0											
Soil Compacting		0											

## Individual Affectation Matrix Construction Stage

System	Physical Natural												
Mediu	Biotic	a					e	ty		ion			ility
Factor	Vegetation	tance		ity	sion	ut	stenc	sibili	gy	nulat		licity	'er ab
Subfactor	Bush Stratum - Species in danger	Impor	Sign	Intens	Exten	Mome	Persis	Rever	Syner	Accun	Effect	Perioc	Recov
Circulation	and operation of vehicles	0											
Presence of	of permanent facilities.	0											
Operation	of the wind energy turbines	0											
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m:	Biotic						a	₽		ion			ility
Factor	Vegetation	tance		sity	sion	ent	stence	ilidis'	ΛĐ.	nulat		dicity	verab
Subfactor	Bush Stratum - Species in danger	Impor	Sign	Intens	Exten	Mome	Persi	Rever	Syner	Accui	Effect	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation and operation of vehicles		0											
Filling, leveli	ng and scarification process.	0											
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											
	Individual Affectati	on	Mat	riv I	Jon	ortu	iro (	Stan					





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Client. Vientos Neuquinos I S.A.

Impact N° 22.01	Subfactor Birds (Species in danger)
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	2.68 %
Impacting Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Affectation of species in danger
Description of impacts	Potential collisions caused by the operation of wind turbines will cause the potential death of exemplars in danger which prowl the area of the wind park.
	Preventing and Mitigation Measures.
Description of Prevention Measures	A Bird Monitoring Program will be implemented.
Description of Mitigation Measures	Walks around the Area of the Project should be taken , with the aim of identifying and eliminating possible (i) focal points of waste that might attract birds of prey and/or carrion eating species; (ii) sites where there may be temporary accumulation of water that might attract species that use the sites for nesting and/or food: (iii) the existence of nests in high places of the wind turbines. If any exemplars of species in danger is found damaged and/or dead in the area of the project, the operation of the project must come to a halt until actions are taken to avoid such incidents.
Priority	High
Expected Effectiveness	Medium

Impact N° 22.02	Subfactor Birds (Species in danger)
STAGE	DEPARTURE
Affectation Absolute percentage	1.95 %
Impacting Actions	Dismantling of the wind turbines.
Location.	Project Area
Impacts.	Affectation of species in danger
Description of impacts	Motorized vehicles may cause collisions and potential dangers. Demolition and moving away of the facilities will be positive affectations that will diminish the risk to the exemplars of species in danger that prowl around the area of the project.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply

"111	Environmental Ir Wind Energy P Neuquir	Environmental Impact Study Wind Energy Park Vientos Neuquinos I						
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14					
Author Scudel	ati & Asociados S.R.L		www.scudelati.com.ar					

System	Physical Natural									_			``
Mediu	Biotic	е			5		ce	ility		ation		ty	ability
Factor	Fauna	ortan	_	nsity	nsio	lent	ister	ersib	ergy	nmu	t	odici	overa
Subfactor	Birds (Species in danger)	Impo	Sign	Inter	Exte	Моп	Pers	Reve	Syne	Acci	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	0											
Operation	of the wind energy turbines	-19	-1	2	2	2	1	1	1	1	1	1	1
Inadequate	waste management	0											
	RGY GENERATION PROCESS	0											

## Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m <sup>.</sup>	Biotic	0					е	ty		ion			ility
Factor	Fauna	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Birds (Species in danger)	oduuj	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	17	1	1	1	1	4	1	2	1	1	1	1
Circulation a	nd operation of vehicles	0											
Filling, level	ng and scarification process.	0											
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											





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Client. Vientos Neuquinos I S.A.

Impact N° 15.01	Subfactor Mammals - Behavior
STAGE	CONSTRUCTION
Affectation Absolute percentage	4.33 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Operation of electric generator equipment Grubbing and clearance of the site Filling, leveling and scarification process. Inadequate waste management
Location.	Project Area
Impacts.	Behavior modification
Description of impacts	In the case of the project the behvior modification by anthropic influence in the zone might be due to: - vehicle circulation that might cause the death of any exemplar by collision (specially cattle). - inadequate disposition of domestic waste, which constitute attractive point of attention for rodents (rats, mice) and the fauna in general; and may cause in modifications in their diets and possible diseases. - noise generation caused by human beings and vehicle circulation. This will have a negative impact in the sub factor, chasing away temporarily the species of the zone. It is important to say that the species that live in the zone have adapted to the anthropic influence by the presence of rural inhabitants contiguous to the area of the project. Filling, leveling and scarification activities subsequent to the construction of the Wind Energy Park will have a positive affectation since they will enhace the recovering of the habitat of those species that have moved in a temporary way
Pr	eventing and Mitigation Measures.
Description of Prevention Measures	Drive at low speed in the project surroundings. Control noise emissions of electric wind turbines requiring preventing maintenance tasks . Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions. If livestock is seen in the site , elements to keep them out of the facilities should be used ( electric fences or protecting walls and report immediately ) Waste Management Procedures will be implemented. It is strictly forbidden the hunting of mammals in the Area of the Project. All access paths and roads should be signaled adequately with road posters that indicate loose livestock.
Description of Mitigation Measures	Reach an agreement with the livestock proprietors withing the area of
Priority	Medium
Expected Effectiveness	High



Impact N° 15.02	Subfactor Mammals - Behavior	
STAGE	OPERATION AND MAINTENANCE	
Affectation Absolute percentage	6.20 %	
Impacting Actions	Circulation and operation of vehicles Operation of the wind energy turbines Inadequate waste management	
Location.	Project Area	
Impacts.	Behavior modification	
Description of impacts	The modification in mammals behavior will be due to the inadequate domestic waste, which constitute attractive point of attention for rodents (rats, mice) and the fauna in general; and may cause in modifications in their diet and possible diseases. Even though, wind energy turbines get along with livestock farming and the traffic will be very little because there will be a small quantity of vehicles in the area of the project, there might be accidents that harm the mammals.	
Preventing and Mitigation Measures.		
Description of Prevention Measures	Drive at low speed in the project surroundings. If livestock is seen in the site , elements to keep them out of the facilities should be used ( electric fences or protecting walls and report to their proprietors immediately ) Waste Management Procedures will be implemented. It is strictly forbidden the hunting of mammals in the Area of the Project. All access paths and roads should be signaled adequately with road posters that indicate loose livestock. Monitor mammals using the Biota Base Line as a guide.	
Description of Mitigation Measures	Perimeter fences and safety posters (speed reduction) will mitigate the risks of electrocution and trampling. Reach an agreement with livestock proprietors for the maintenance plan of the facilities to avoid disturbances in their daily labor.	
Priority	Medium	
Expected Effectiveness	High	

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Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14
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Impact N° 15.03	Subfactor Mammals - Behavior		
STAGE	DEPARTURE		
Affectation Absolute percentage	0.46 %		
Impacting Actions	Dismantling of the wind turbines. Circulation and operation of vehicles Demolition/withdrawal of foundations and permanent installations.		
Location.	Project Area		
Impacts.	Animal Behavior modification		
Description of impacts	During the activities in the work, the circulation and operation of vehicles will cause noise and potential risks of trampling which will affect negatively in animals behavior. Dismantling, demolition and moving away the wind turbines, the activities of soil filling, leveling and scarification will be positive impacts of the sub factor. When reducing human presence in the site, natural areas will be favored.		
Preventing and Mitigation Measures.			
Description of Prevention Measures	Scription of ntion Measures Big Strictly forbidden the hunting of mammals in the Area of the Project. All access paths and roads should be signaled adequately with road posters that indicate loose livestock.		
Description of Mitigation Measures	Reach an agreement with livestock proprietors for the maintenance plan of the facilities to avoid disturbances in their daily labor.		
Priority	Medium		
Expected Effectiveness	High		
''''	Environmental I Wind Energy P Neuquir	mpact Study ark Vientos los I	Vientos Neuquinos
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Client. Vientos	Neuquinos I S.A.		EIA PEBC 001/14
Author Scude	ati & Asociados S.R.L		www.scudelati.com.ar

System	Physical Natural												
Mediu	Biotic	е			c		e	ility		ation		Ĺ	bility
Factor	Fauna	ortan		nsity	nsio	lent	Persister	Reversib	Synergy	Accumula	st	Periodicit	overa
Subfactor	Mammals (Behavior)	Impo	Impo Sign	Inter	Exte	Mon					Effe		Recc
Soil Movement		-16	-1	1	1	4	1	1	1	1	1	1	1
Circulation and operation of vehicles		-18	-1	1	1	2	2	1	1	1	1	4	1
Operation of electric generator equipment		-16	-1	1	1	4	1	1	1	1	1	1	1
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	-16	-1	1	1	4	1	1	1	1	1	1	1
Filling, leveling and scarification process.		24	1	1	1	2	4	1	2	1	4	4	1
Inadequate waste management		-16	-1	1	1	4	1	1	1	1	1	1	1
Soil Compacting		0											
	Individual Affactation N												

# Individual Affectation Matrix Construction Stage

System	Physical Natural									_			
Mediu	Biotic	е			c		ce	ility		ation		ť	bility
Factor	Fauna	ortan		Isity	nsio	lent	ister	ersib	ergy	Inmr	t	odici	overa
Subfactor	Mammals (Behavior)	Impo	Sign	Inter	Exte	Morr	Pers	Reve	Syne	Accı	Effe	Perio	Reco
Circulation	and operation of vehicles	-16	-1	1	1	4	1	1	1	1	1	1	1
Presence o	f permanent facilities.	0											
Operation	of the wind energy turbines	-14	-1	1	1	2	1	1	1	1	1	1	1
Inadequate waste management		-14	-1	1	1	2	1	1	1	1	1	1	1
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

''''	Environmental I Wind Energy P Neuquir	mpact Study Park Vientos nos I	Vientos Neuquinos
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14
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System	Physical Natural												
Mediu	Biotic	0					e	ty		ion			ility
Factor	Fauna	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	Ŀ	dicity	verab
Subfactor	Mammals (Behavior)	Impo	Import Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling of the wind turbines.		36	1	2	4	2	4	4	1	1	4	4	2
Circulation and operation of vehicles		-16	-1	1	1	4	1	1	1	1	1	1	1
Filling, level	ing and scarification process.	0											
Inadequate v	waste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		-16	-1	1	1	4	1	1	1	1	1	1	1
Unemploym	ent	0											

Individual Affectation Matrix Departure Stage

Environmen Wind Energy Neu	tal Impact Study ıy Park Vientos quinos I	Vientos Neuquinos
Client. Vientos Neuquinos I S.A.		EIA PEBC 001/14
Author Scudelati & Asociados S.R.L		www.scudelati.com.ar

Impact N° 16.01	Subfactor Mammals - Habitat quality
STAGE	CONSTRUCTION
Affectation Absolute percentage	4.33 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Operation of electric generator equipment Grubbing and clearance of the site Filling, leveling and scarification process. Inadequate waste management
Location.	Project Area
Impacts.	Habitat Modification
Description of impacts	<ul> <li>Modifications by anthropic influence in habitat quality in the zone may be due to:</li> <li>grubbing and clearance of the site and soil movement which may destroy animals' shelters (dens) and food sectors with the subsequent temporal displacement to other habitats.</li> <li>the inadequate disposition of domestic waste, which constitute attractive focal points for rodents (rats, mice).</li> <li>vehicle circulation and operation of electric equipment which may generate noise emission disturbances for the species.</li> <li>Filling, leveling and scarification activities subsequent to the construction of the Wind Energy Park will have a positive affectation since they will enhance the recovering of the habitat affected.</li> </ul>
Pr	eventing and Mitigation Measures.
Description of Prevention Measures	Unnecessary grubbing should be avoided. Ensure not to affect sites where there is evidence of dens. Waste Management Procedures will be implemented. It is strictly forbidden the affectation on purpose of sites with dens. Keep maintenance tasks in electric generators which tend to reduce noise emissions. Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium

111	Environm Wind En N	ental Impact Study ergy Park Vientos leuquinos I	Vientos Neuquinos
Client. Viente	os Neuquinos I S.A.		EIA PEBC 001/14
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Impact N° 16.02	Subfactor Mammals - Habitat quality
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute	1.97 %
percentage	Operation of the wind energy turbings
Impacting Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Habitat Modification
Description of impacts	Even though, wind energy turbines get along with livestock farming and the traffic will be very little because there will be a small quantity of vehicles in the area of the project, accidents that harm the animals might happen if they enter zones where electric incidents might happen.
	Preventing and Mitigation Measures.
Description of	There must be and keep in good conditions of maintenance perimeter
Prevention Measures	fencing to reduce the risk of electrocution of the species.
Description of	None
Mitigation Measures	
Priority	Medium
Expected Effectiveness	Medium

Impact N° 16.03	Subfactor Mammals - Habitat quality
STAGE	DEPARTURE
Affectation Absolute percentage	4.71 %
Impacting Actions	Dismantling of the wind turbines. Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Habitat restitution.
Description of impacts	Dismantling, demolition and moving away the wind turbines, the activities of soil filling, leveling and scarification, as well as re planting with native species will be positive impacts of the sub factor. The reduction of human presence in the site will favor habitat restitution (redefinition of the sheltering and food sites) reestablishing natural areas. As a negative affectation related there is the incorrect disposition of waste with the potential influence over habitat during work tasks.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Waste Management Procedures will be implemented. Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium

''''	Environment Wind Energ Neuc	al Imp y Par quino:	mpact Study Park Vientos mos I						itos uinos				
Client. Viento	os Neuquinos I S.A.									E	IA PE	BC 0	01/14
Author Scude	elati & Asociados S.R.L								١	www.	scude	elati.c	om.ar
System	Physical Natural												
Mediu	Biotic	e			_		e	lity		ation		2	bility
Factor	Fauna	ortan		isity	nsior	lent	isten	ersibi	ergy	Inmu	;;	odicit	overa
Subfactor	Habitat quality	lmpo	Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effec	Perio	Reco
Soil Moveme	nt	-16	-1	1	1	4	1	1	1	1	1	1	1
Circulation a	nd operation of vehicles	-18	-1	1	1	2	2	1	1	1	1	4	1
Operation of	electric generator equipment	<mark>-16</mark> -1 1 1 4 1 1 1 1 1 1 1					1						
Constructior	of permanent facilities.	0											
Grubbing an	d clearance of the site	<mark>-16</mark> -1 1 1 4 1 1 1 1 1 1 1					1						
Filling, leveli	ng and scarification process.	24	1	1	1	2	4	1	2	1	4	4	1

Individual	Affectation	Matrix	Constru	iction	Stage
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-16 -1

System	Physical Natural												
Mediu	Biotic	ce			Ē		e	ility		ation		ty	ability
Factor	Fauna	ortan	_	Isity	nsio	nent	ister	ersib	ergy	nmu	t	odici	overa
Subfactor	Habitat quality	Impo	Sign	Inter	Exte	лоМ	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	0											
Operation	of the wind energy turbines	-14	-1	1	1	2	1	1	1	1	1	1	1
Inadequate	waste management	0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

Inadequate waste management

Soil Compacting

''''	Environmental Impact Study Wind Energy Park Vientos Neuquinos I					tos Jinos					
Client. Vient	os Neuquinos I S.A.							E	IA PE	BC 0	01/14
Author Scud	lelati & Asociados S.R.L						,	www.	scude	elati.c	om.ar
System	Physical Natural										
Mediu	Biotic							ç			ty

e					e	ity		tio		-	ili
rtanc		sity	Ision	ent	stenc	rsibil	rgy	mula	t	dicity	verat
Impo	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
36	1	2	4	2	4	4	1	1	4	4	2
0											
24	1	1	1	2	4	1	2	1	4	4	1
-19	-1	2	2	2	1	1	1	1	1	1	1
0											
0											
0											
	Jac       36       0       24       -19       0       0       0       0	Sign         Importance           0         0           -10         -1           0         -1           0         0           0         0           0         0           0         0           0         0           0         0           0         0	Importance       Importance         36       1       2         0       .       .         24       1       1         -19       -1       2         0       .       .         0       .       .         0       .       .         0       .       .         0       .       .         0       .       .         0       .       .         0       .       .         0       .       .	Lange         Lange <thlange< th=""> <thlange< th=""> <thla< th=""><th>Moment         Image: second seco</th><th>Moment       Image: second secon</th><th>Moment       Importance         0       1       2       4       36         1       2       4       2       4         0       1       1       1       2       4         1       1       1       2       4       36         1       1       1       2       4       4         0       1       1       1       2       4         0       1       1       1       2       4       4         0       1       1       1       1       2       4       4         0       1       1       1       1       1       1       1         0       1</th><th>Nuescond       Nuescond       <th< th=""><th>Momentation       Momentation       Momentation       Momentation         0       1       2       4       2       4       36         1       1       2       4       4       1       36         1       1       2       4       4       1       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       1       36       36       36       36</th><th>0       1       2       2       4       2       4       4       9         1       1       1       2       2       1       1       3       3         1       1       1       2       2       1       1       3       3         1       1       1       2       1       3       3       3       3         1       1       1       2       1       3</th><th>Moment       Moment       Moment</th></th<></th></thla<></thlange<></thlange<>	Moment         Image: second seco	Moment       Image: second secon	Moment       Importance         0       1       2       4       36         1       2       4       2       4         0       1       1       1       2       4         1       1       1       2       4       36         1       1       1       2       4       4         0       1       1       1       2       4         0       1       1       1       2       4       4         0       1       1       1       1       2       4       4         0       1       1       1       1       1       1       1         0       1	Nuescond       Nuescond <th< th=""><th>Momentation       Momentation       Momentation       Momentation         0       1       2       4       2       4       36         1       1       2       4       4       1       36         1       1       2       4       4       1       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       1       36       36       36       36</th><th>0       1       2       2       4       2       4       4       9         1       1       1       2       2       1       1       3       3         1       1       1       2       2       1       1       3       3         1       1       1       2       1       3       3       3       3         1       1       1       2       1       3</th><th>Moment       Moment       Moment</th></th<>	Momentation       Momentation       Momentation       Momentation         0       1       2       4       2       4       36         1       1       2       4       4       1       36         1       1       2       4       4       1       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       2       4       4       4       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       36       36       36         1       1       1       1       1       1       1       36       36       36       36	0       1       2       2       4       2       4       4       9         1       1       1       2       2       1       1       3       3         1       1       1       2       2       1       1       3       3         1       1       1       2       1       3       3       3       3         1       1       1       2       1       3	Moment       Moment





Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

System	Physical Natural												
Mediu	Biotic	e			-		се	lity		ation		y	bility
Factor	Fauna	ortano		ısity	nsior	nent	isten	ersibi	ergy	almula	ct	odicit	overa
Subfactor	Mammals (Biodiversity)	Impo	Sign	Inter	Exte	Моп	Pers	Reve	Syne	Accı	Effe	Perie	Reco
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
Inadequate waste management		0											
Soil Compacting		0											

# Individual Affectation Matrix Construction Stage

System	Physical Natural									_			y
Mediu	Biotic	e			u		eou	ility		atior		ty	abilit
Factor	Fauna	ortan	_	ısity	nsio	nent	ister	ersib	ergy	Inmu	ct	odici	overa
Subfactor	Mammals (Biodiversity)	Impo	Sign	Inter	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec
Circulation	and operation of vehicles	0											
Presence o	of permanent facilities.	0											
Operation	of the wind energy turbines	0											
Inadequate	e waste management	0											
WIND ENE	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m·	Biotic	0					e	ty		ion			ility
Factor	Fauna	rtance		sity	sion	ent	stenc	rsibili	rgy	mulat	Ļ	dicity	verab
Subfactor	Mammals (Biodiversity)	odwj	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, level	ing and scarification process.	0											
Inadequate	waste management	0											
WIND ENER	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											
	Individual Affectation	14-4	wise I		~ **·		24						



# Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 18 - Mammals - Species in danger



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Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

System	Physical Natural												
Mediu	Biotic	се			c		ce	ility		ation		ty	bility
Factor	Fauna	ortan		ısity	nsio	lent	isten	ersibi	ergy	amula	ct	odici	overa
Subfactor	Mammals (Species in danger)	bdml	Sign	Inter	Exte	мом	Pers	Reve	Syne	Accı	Effe	Peri	Rec
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
Inadequate waste management		0											
Soil Compacting		0											

### Individual Affectation Matrix Construction Stage

System	Physical Natural									_			~
Mediu	Biotic	e			L		JCe	ility		atior		ty	abilit
Factor	Fauna	ortan	_	nsity	ensio	lent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor	Mammals (Species in danger)	Impe	Sign	Intei	Exte	Mon	Pers	Rev	Syn	Acci	Effe	Peri	Rec
Circulatior	and operation of vehicles	0											
Presence of	of permanent facilities.	0											
Operation	of the wind energy turbines	0											
Inadequate	e waste management	0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m·	Biotic						a	Ţ,		ion			ility
Factor	Fauna	rtance		sity	Ision	ent	stence	rsibili	rgy	mulat	ţ.	dicity	verabi
Subfactor	Mammals (Species in danger)	Impo	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	nd operation of vehicles	0											
Filling, leveli	ng and scarification process.	0											
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemployment		0											
	In dividual Affectation	Mat					24.0.0						





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Client. Vientos Neuquinos I S.A.

Impact N° 19.01	Subfactor Birds (Behavior)
STAGE	CONSTRUCTION
Affectation Absolute percentage	4.55%
Impacting Actions	Soil Movement Circulation and operation of vehicles Operation of electric generator equipment Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Behavior modification
Description of impacts	Species behavior may be affected by the human presence and vehicle traffic that might cause collisions and potential death of exemplars. Wind turbine and machinery noise during soil movement might chased them away. Inadequate waste management may create food points and producing modification in their diet and developing diseases. Grubbing and clearing of the site may reduce food points. It is important to say that the species that live in the zone have adapted to the anthropic influence by the presence of rural inhabitants contiguous to the area of the project. At the end of the stage, the tasks of filling, leveling and scarification will restore the food sites affected.
	Preventing and Mitigation Measures.
Description of Prevention Measures	All access paths and roads should be signaled adequately with road posters that indicate bird life. It is strictly forbidden the hunting of birds in the Area of the Project. Waste Management Procedures will be implemented. Drive at low speed in the project surroundings. Reduce vegetation grubbing sites Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions. Control noise emissions of electric wind turbines requiring preventing maintenance tasks .
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium



Impact N° 19.02	Subfactor Birds (Behavior)
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	6.90 %
Impacting Actions	Circulation and operation of vehicles Operation of the wind energy turbines Inadequate waste management
Location.	Project Area
Impacts.	Bird life behavior modification
Description of impacts	Noise generation and potential collisions caused by the operation of wind turbines will potentially cause the modification of food sites. Even though there will be few people during this stage, the presence of open rubbish dumps, the generation of domestic waste and their inadequate disposal create attractive food points for birds of prey and carrion-eating birds. If these focal points are located near the basis of the wind turbines, they or the equipment tower may cause collisions with the exemplars legs.
	Preventing and Mitigation Measures.
Description of Prevention Measures	A Bird Monitoring Program will be implemented. Waste Management Procedures will be implemented. Bird hunting is strictly forbidden. All access paths and roads should be signaled adequately with road posters that indicate bird life.
Description of Mitigation Measures	Walks around the Area of the Project should be taken , with the aim of identifying and eliminating possible (i) focal points of waste that might attract birds of prey and/or carrion eating species; (ii) sites where there may be temporary accumulation of water that might attract species that use the sites for nesting and/or food.
Priority	High
Expected Effectiveness	Medium

Environmental Wind Energy Neugu	Impact Study Park Vientos inos I
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Impact N° 19.03	Subfactor Birds (Behavior)
STAGE	DEPARTURE
Affectation Absolute percentage	0.46 %
Impacting Actions	Dismantling of the wind turbines. Circulation and operation of vehicles Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	Bird life behavior modification
Description of impacts	During the circulation and operation of vehicles will produce noise and potential risks of trampling which will affect negatively in animals 'behavior. The modification in bird life behavior will be affected positively by the noise reduction produced by the source of emission (wind energy turbines) Wind turbine dismantling will have a positive affectation if the sources of possible collisions with the birds are eliminated.
	Preventing and Mitigation Measures.
Description of Prevention Measures	All access paths and roads should be signaled adequately with road posters that indicate bird life. It is strictly forbidden the hunting of birds in the Area of the Project. Waste Management Procedures will be implemented. Drive at low speed in the project surroundings. Reduce vegetation grubbing sites Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions. Control noise emissions of electric wind turbines requiring preventing maintenance tasks .
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium

.111	Environmental Wind Energy Neuqu	Impact Study Park Vientos inos I	Vientos Neuquinos
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14

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System	Physical Natural												
Mediu	Biotic	e			۲		e	ility		ation		ťy	bility
Factor	Fauna	ortan		nsity	nsio	lent	isten	ersibi	ergy	Inmr	ct	odici	overa
Subfactor	Birds (Behavior)	lmpo	Sign	Inter	Exte	лоМ	Pers	Reve	Syne	Accl	Effe	Peri	Reco
Soil Moveme	nt	-16	-1	1	1	4	1	1	1	1	1	1	1
Circulation a	nd operation of vehicles	-18	-1	1	1	2	2	1	1	1	1	4	1
Operation of	electric generator equipment	-16	-1	1	1	4	1	1	1	1	1	1	1
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	-19	-1	2	1	4	1	1	1	1	1	1	1
Filling, leveling and scarification process.		24	1	1	1	2	4	1	2	1	4	4	1
Inadequate waste management		-16	-1	1	2	2	1	1	1	1	1	1	1
Soil Compac	ting	0											

# Individual Affectation Matrix Construction Stage

System Physical I	Natural									_			
Mediu Biotic		се			c		eou	ility		ation		ty	ability
Factor Fauna		ortan	_	nsity	nsio	Jent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor Birds (Be	havior)	lmpo	Sign	Inter	Exte	Моп	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation and opera	ation of vehicles	-16	-1	1	1	4	1	1	1	1	1	1	1
Presence of permane	nt facilities.	0											
Operation of the wind	l energy turbines	-19	-1	2	2	2	1	1	1	1	1	1	1
Inadequate waste management		-14	-1	1	1	2	1	1	1	1	1	1	1
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

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	Environmen Wind Energ Neu	tal Imp gy Parl quinos	mpact Study 'ark Vientos nos I									Vientos Neuquinos			
Client. Vientos	Neuquinos I S.A.		EIA P												
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System	Physical Natural							Ą							
Mediu m:	Biotic									ion			ility		
Factor	Fauna	rtance		sity	nsion	ent	stence	rsibili	rgy	mulat	÷	dicity	verab		
Subfactor	Birds (Behavior)	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Peric	Reco		
Dismantling	of the wind turbines.	36	1	2	4	2	4	4	1	1	4	4	2		
Circulation a	and operation of vehicles	-16	-1	1	1	4	1	1	1	1	1	1	1		
Filling, level	ing and scarification process.	0													
Inadequate	waste management	0													
	GY GENERATION PROCESS	0													
Demolition/v permanent i	vithdrawal of foundations and nstallations.	-16	-1	1	1	4	1	1	1	1	1	1	1		
Unemploym	ent	0													





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Client. Vientos Neuquinos I S.A.

Impact N° 20.01	Subfactor Birds life (habitat quality)
STAGE	CONSTRUCTION
Affectation Absolute percentage	4.55%
Impacting Actions	Soil Movement Circulation and operation of vehicles Operation of electric generator equipment Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	
Description of impacts	Bird life might be affected by grubbing and clearing of the site (specially bushes) connected to the construction of the different areas causing their temporary displacement to other habitat for nesting. The noise generated by the vehicles that do soil work and the operation of the wind turbines may modify habitat quality. Inadequate waste management might affect quality of life in the sites where the species live. At the end of the stage, the tasks of filling, leveling and scarification will restore the habitat sites affected by the project.
	Preventing and Mitigation Measures.
Description of Prevention Measures	All access paths and roads should be signaled adequately with road posters that indicate bird life. It is strictly forbidden the hunting of birds in the Area of the Project. Waste Management Procedures will be implemented. Require that vehicles enter the VTV site so that it is possible to control the reduction of noise emissions. Control noise emissions of electric wind turbines requiring preventing maintenance tasks.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium





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Client. Vientos Neuquinos I S.A.

Impact N° 20.02	Subfactor Birds life (habitat quality)
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	4.51 %
Impacting Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Habitat modification
Description of impacts	Wind energy turbine operation will cause potential modification of the habitat due to the risks of incidents related to collisions with wind turbines.
	Preventing and Mitigation Measures.
Description of Prevention Measures	A Bird Monitoring Program will be implemented.
Description of Mitigation Measures	Walks around the Area of the Project should be taken, with the aim of identifying and eliminating possible (i) focal points of waste that might attract birds of prey and/or carrion eating species; (ii) sites where there may be temporary accumulation of water that might attract species that use the sites for nesting and/or food: (iii) the existence of nests in high places of the wind turbines.
Priority	High
Expected Effectiveness	Medium

Impact N° 20.03	Subfactor Birds life (habitat quality)
STAGE	DEPARTURE
Affectation Absolute percentage	6.89 %
Impacting Actions	Dismantling of the wind turbines. Filling, leveling, scarification activity and re planting.
Location.	Project Area
Impacts.	Habitat Quality Modification
Description of impacts	Demolition and moving away foundations as well as re planting of native species will be positive affectations that will favor the return of birds to their habitat. When reducing human presence in the site, habitat modification will be favored.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply

'///	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 20 - Bird life - Habitat quality											Vientos Neuquinos				
Client. Vientos	Neuquinos I S.A.			EIA P	EBC (	)01/14										
Author Scudela	ati & Asociados S.R.L		www.scudelati.com.a													
System	Physical Natural															
Mediu	Biotic	e			_		e	lity		ation		۲.	bility			
Factor	Fauna	ortano		nsity	nsior	nent	isten	ersibi	ergy	umula	t	odicit	overa			
Subfactor	Habitat quality	lmpo	Sigr	Inter	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec			
Soil Moveme	nt	-16	-1	1	1	4	1	1	1	1	1	1	1			
Circulation a	nd operation of vehicles	-18	-1	1	1	2	2	1	1	1	1	4	1			
Operation of	electric generator equipment	-16	-1	1	1	4	1	1	1	1	1	1	1			
Construction	of permanent facilities.	0														
Grubbing an	d clearance of the site	-19	-1	2	1	4	1	1	1	1	1	1	1			
Filling, leveling and scarification process.		24	1	1	1	2	4	1	2	1	4	4	1			
Inadequate waste management		-16	-1	1	2	2	1	1	1	1	1	1	1			
Soil Compacting		0														

# Individual Affectation Matrix Construction Stage

System	Physical Natural												
Mediu	Biotic	се			5		eou	ility		ation		ty	ability
Factor	Fauna	ortan		nsity	nsio	nent	sister	ersib	ergy	nmu	t	odici	overa
Subfactor	Habitat quality	odwj	Sign	Inter	Exte	лоМ	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	0											
Operation of the wind energy turbines		-32	-1	2	2	2	4	4	1	1	4	4	2
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

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Client. Vientos	Client. Vientos Neuquinos I S.A.				EIA PEE											
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System	Physical Natural															
Mediu	Biotic							~		uo			lity			
Factor	Fauna	rtance		sity	nsion	ent	istence	ersibilit	rgy	imulati	t.	dicity	verabi			
Subfactor	Habitat quality	Impo	Sign	Inten	Extei	Mom	Persi	Reve	Syne	Accu	Effec	Peric	Reco			
Dismantling	of the wind turbines.	36	1	2	4	2	4	4	1	1	4	4	2			
Circulation a	and operation of vehicles	0														
Filling, level	ing and scarification process.	24	1	1	1	2	4	1	2	1	4	4	1			
	vaste management	0														
WIND ENERGY GENERATION PROCESS		0														
Demolition/withdrawal of foundations and permanent installations.		0														
Unemploym	ent	0														





Client. Vientos Neuquinos I S.A.

Impact N° 21.01	Subfactor Bird life - Biodiversity
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	2.68 %
Impacting Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Biodiversity affectation
Description of impacts	Potential collisions caused by the operation of wind energy turbines will produce the potential modification of the biodiversity by migration or death of exemplars.
I	Preventing and Mitigation Measures.
Description of Prevention Measures	A Bird Monitoring Program will be implemented.
Description of Mitigation Measures	Walks around the Area of the Project should be taken, with the aim of identifying and eliminating possible (i) focal points of waste that might attract birds of prey and/or carrion eating species; (ii) sites where there may be temporary accumulation of water that might attract species that use the sites for nesting and/or food: (iii) the existence of nests in high places of the wind turbines.
Priority	High
Expected Effectiveness	Medium

Impact N° 21.02	Subfactor Bird life - Biodiversity
STAGE	DEPARTURE
Affectation Absolute percentage	1.95%
Impacting Actions	Dismantling of the wind turbines.
Location.	Project Area
Impacts.	Biodiversity affectation
Description of impacts	Demolition and moving away foundations as well as re planting of native species will favor the return of birds to their habitat. When reducing human presence in the site, habitat modification will be favored.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply



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	Physical Natural									_			
Mediu	Biotic	се			۲		eou	ility		ation		ty	ability
Factor	Fauna	ortan	_	nsity	insio	lent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor	Birds (Bio diversity)	Impo	Sign	Inter	Exte	мом	Pers	Reve	Syne	Acci	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence of permanent facilities.		0											
Operation of the wind energy turbines		-19	-1	2	2	2	1	1	1	1	1	1	1
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

# Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m <sup>.</sup>	Biotic						e	ťy		ion			ility
Factor	Fauna	rtance		sity	nsion	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Birds (Bio diversity)	lmpo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	17	1	1	1	1	4	1	2	1	1	1	1
Circulation a	nd operation of vehicles	0											
Filling, leveling and scarification process.		0											
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											



Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 22 - Avifauna - Species in danger



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Impact N° 22.01	Subfactor Birds (Species in danger)
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	2.68 %
Impacting Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Affectation of species in danger
Description of impacts	Potential collisions caused by the operation of wind turbines will cause the potential death of exemplars in danger which prowl the area of the wind park.
	Preventing and Mitigation Measures.
Description of Prevention Measures	A Bird Monitoring Program will be implemented.
Description of Mitigation Measures	Walks around the Area of the Project should be taken , with the aim of identifying and eliminating possible (i) focal points of waste that might attract birds of prey and/or carrion eating species; (ii) sites where there may be temporary accumulation of water that might attract species that use the sites for nesting and/or food: (iii) the existence of nests in high places of the wind turbines. If any exemplar of species in danger is found damaged and/or dead in the area of the project, the operation of the project must come to a halt until actions are taken to avoid such incidents.
Priority	High
Expected Effectiveness	Medium

Impact N° 22.02	Subfactor Birds (Species in danger)
STAGE	DEPARTURE
Affectation Absolute percentage	1.95 %
Impacting Actions	Dismantling of the wind turbines.
Location.	Project Area
Impacts.	Affectation of species in danger
Description of impacts	Motorized vehicles may cause collisions and potential dangers. Demolition and moving away of the facilities will be positive affectations that will diminish the risk to the exemplars of species in danger that prowl around the area of the project.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply



#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 22 - Avifauna - Species in danger



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System	Physical Natural									_			,
Mediu	Biotic	се			2		eou	ility		ation		ty	ability
Factor	Fauna	ortan		Isity	nsio	lent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor	Birds (Species in danger)	lmpo	lmpc Sign	Inter	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec
Circulation	and operation of vehicles	0											
Presence of permanent facilities.		0											
Operation of the wind energy turbines		-19	-1	2	2	2	1	1	1	1	1	1	1
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu	Biotic	0					e	ty		ion			ility
Factor	Fauna	rtance		sity	sion	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Birds (Species in danger)	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	17	1	1	1	1	4	1	2	1	1	1	1
Circulation and operation of vehicles		0											
Filling, leveling and scarification process.		0											
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											





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Impact N° 23.01	Subfactor Microfauna - Behavior
STAGE	CONSTRUCTION
Affectation Absolute percentage	2.24 %
Impacting Actions	Soil Movement Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Behavior modification
Description of impacts	<ul> <li>Microfauna behavior modification may be because</li> <li>grubbing/clearing of the site and soil movement that may destroy food and shelter sites.</li> <li>inadequate disposition of domestic waste, which constitute focal points of proliferation of vectors like flies, cockroaches, among others.</li> <li>Filling, leveling and scarification activities subsequent to the construction of the Wind Energy Park will have a positive affectation since they will enhance the recovering of the habitat affected.</li> </ul>
Pr	eventing and Mitigation Measures.
Description of Prevention Measures	Implement a Waste Management Procedure
Description of Mitigation Measures	An adequate plan prior to the beginning of the work will ensure the least intervention over the project zone.
Priority	Low
Expected Effectiveness	Low

System	Physical Natural												
Medium:	Biotic	e			c		e	ility		ation		ť	ıbility
Factor	Fauna	ortan		ısity	nsio	lent	isten	ersib	ergy	nmul	t	odici	overa
Subfactor	Microfauna (Behavior)	Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Reco
Soil Movement		-15	-1	1	1	2	2	1	1	1	1	1	1
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	-16	-1	1	1	4	1	1	1	1	1	1	1
Filling, leveling and scarification process.		17	1	1	1	2	4	1	1	1	1	1	1
Inadequate waste management		-16	-1	1	1	4	1	1	1	1	1	1	1
Soil Compacting		0											

Individual Affectation Matrix Construction Stage





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Impact N° 24.01	Subfactor Microfauna - habitat quality
STAGE	CONSTRUCTION
Affectation Absolute percentage	2.98 %
Impacting Actions	Soil Movement Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management Soil Compacting
Location.	Project Area
Impacts.	Habitat modification
Description of impacts	<ul> <li>Microfauna habitat modification may be because</li> <li>grubbing/clearing of the site and soil movement that may destroy food, breeding and shelter sites.</li> <li>inadequate disposition of domestic waste, which constitute focal points of proliferation of vectors like flies, cockroaches, among others.</li> <li>Filling, leveling and scarification activities subsequent to the construction of the Wind Energy Park will have a positive affectation since they will enhance the recovering of the habitat affected.</li> </ul>
Pr	eventing and Mitigation Measures.
Description of Prevention Measures	None
Description of	An adequate plan prior to the beginning of the work will ensure the
Mitigation Measures	least intervention over the project zone.
Priority	Low
Expected Effectiveness	Low

Impact N° 24.02	Subfactor Microfauna - habitat quality
STAGE	DEPARTURE
Affectation Absolute percentage	3.90 %
Impacting Actions	Filling, leveling, scarification activity and re planting. Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	Habitat restitution.
Description of impacts	Moving facilities away followed by filling, leveling and scarification tasks will enhance habitat restitution.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply

	Environment Wind Energ Neuc File 24 - Microfau	al Imp y Park quinos ına - Ի	act St Vient I labitat	udy :os t qualit	ty							Vien Neugu	tos linos
Client. Vientos	Neuquinos I S.A.										EIA P	EBC (	001/14
Author Scudela	ati & Asociados S.R.L									WW	/w.scu	delati.	com.ar
System	Physical Natural												
Medium:	Biotic	e			_		се	lity		ation		N.	bility
Factor	Fauna	ortan		sity	nsior	lent	isten	ersibi	ergy	Inmi	×	odicit	overa
Subfactor	Microfauna (habitat quality)	Impo	Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effec	Perio	Reco
Soil Moveme	nt	-16	-1	1	1	4	1	1	1	1	1	1	1
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	n of permanent facilities.	0											
Grubbing and	d clearance of the site	-16	-1	1	1	4	1	1	1	1	1	1	1
Filling, leveli	ng and scarification process.	24	1	2	2	2	4	1	2	1	2	1	1
Inadequate w	vaste management	-16	-1	1	1	4	1	1	1	1	1	1	1
Soil Compac	ting	-16	-1	1	1	4	1	1	1	1	1	1	1

Individual Affectation Matrix Construction Stage

System	Physical Natural												
Mediu m·	Biotic						е	ty		ion			ility
Factor	Fauna	rtance		sity	nsion	ent	stence	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Microfauna (habitat quality)	lmpo	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, leveli	ing and scarification process.	17	1	1	1	2	4	1	1	1	1	1	1
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/v permanent in	vithdrawal of foundations and nstallations.	17	1	1	1	2	4	1	1	1	1	1	1
Unemploym	ent	0											





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System	Physical Natural												'
Mediu	Biotic	e			c		eo	ility		ation		ty	bility
Factor	Fauna	ortan		nsity	nsio	lent	isten	ersib	ergy	Inmr	st	odici	overa
Subfactor	Microfauna (Biodiversity)	odwj	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Reci
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
nadequate w	vaste management	0											
Soil Compac	ting	0											

# Individual Affectation Matrix Construction Stage

System	Physical Natural									_			v
Mediu	Biotic	ce			L		JCe	ility		atior		ty	abilit
Factor	Fauna	ortan	_	nsity	nsio	nent	ister	ersib	ergy	Inmu	ct	odici	overa
Subfactor	Microfauna (Biodiversity)	lmpe	Sign	Intei	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec
Circulation	and operation of vehicles	0											
Presence o	of permanent facilities.	0											
Operation	of the wind energy turbines	0											
Inadequate	waste management	0											
WIND ENE	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m <sup>.</sup>	Biotic						e	ť		ion			ility
Factor	Fauna	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	Ļ	dicity	verab
Subfactor	Microfauna (Biodiversity)	lmpo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	and operation of vehicles	0											
Filling, level	ing and scarification process.	0											
Inadequate v	waste management	0											
	GY GENERATION PROCESS	0											
Demolition/v permanent in	vithdrawal of foundations and nstallations.	0											
Unemploym	ent	0											

.111	Environmental lı Wind Energy P Neuquir	mpact Study ark Vientos nos I	Vientos Neuquinos
Client. Viento:	s Neuquinos I S.A.		EIA PEBC 001/14
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar

System	Physical Natural												_
Mediu	Biotic	e			c		e	ility		ation		ť	bility
Factor	Fauna	ortan		nsity	nsio	lent	sister	ersib	ergy	nmul	t	odici	overa
Subfactor	Microfauna (Species in danger)	Impo	Sign	Inter	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec
Soil Moveme	nt	0											
Circulation a	nd operation of vehicles	0											
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing and	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
Inadequate w	vaste management	0											
Soil Compact	ting	0											

# Individual Affectation Matrix Construction Stage

System	Physical Natural												'
Mediu	Biotic	e			c		eo	ility		ation		ty	bility
Factor	Fauna	ortan	_	Isity	nsio	lent	ister	ersib	ərgy	Inmu	t	odici	overa
Subfactor	Microfauna (Species in danger)	Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Rec
Circulation	and operation of vehicles	0											
Presence of	f permanent facilities.	0											
Operation	of the wind energy turbines	0											
Inadequate	waste management	0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Physical Natural												
Mediu m·	Biotic						a	Ę		ion			ility
Factor	Fauna	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	ţ.	dicity	verab
Subfactor	Microfauna (Species in danger)	odwj	Sign	Inten	Exter	Mome	Persi	Reve	Synei	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation a	nd operation of vehicles	0											
Filling, leveli	ng and scarification process.	0											
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/w	vithdrawal of foundations and permanent	0											
Unemployme	ent	0											

# Individual Affectation Matrix Departure Stage



Physical Natural												_
Biotic	ee			-		e	ility		ation		۲	bility
Fauna	ortan		nsity	nsio	lent	isten	ersibi	ergy	nmu	t	odici	overa
PROTECTED NATURAL AREAS	Impo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Acci	Effe	Peri	Reco
nt	0											
nd operation of vehicles	0											
electric generator equipment	0											
of permanent facilities.	0											
d clearance of the site	0											
ng and scarification process.	0											
vaste management	0											
ting	0											
	Physical Natural Biotic Fauna PROTECTED NATURAL AREAS ent nd operation of vehicles electric generator equipment of permanent facilities. d clearance of the site ng and scarification process. waste management ting	Physical Natural       Part of permanent facilities.       Par	Physical Natural       Physical Natural         Biotic       Perform         Fauna       0         PROTECTED NATURAL AREAS       0         Ind operation of vehicles       0         electric generator equipment       0         of permanent facilities.       0         of clearance of the site       0         mathematical scarification process.       0         vaste management       0         ting       0	Physical NaturalAnd the second se	Physical Naturaland the second se	Physical NaturalA bit of the stress of the stre	Physical NaturalA bit of the stress of the stre	Physical NaturalA bioticA biotic <th< th=""><th>Physical NaturalAnd Area and Are</th><th>Physical NaturalA BioticA FaunaA<br< th=""><th>Physical NaturalPhysical NaturalPhysi</th><th>Physical Natural       Physical Natural       <th< th=""></th<></th></br<></br></br></br></br></br></br></br></br></br></br></br></th></th<>	Physical NaturalAnd Area and Are	Physical NaturalA BioticA FaunaA 	Physical NaturalPhysical NaturalPhysi	Physical Natural       Physical Natural <th< th=""></th<>

## Individual Affectation Matrix Construction Stage

System Physical Natural										_			'
Mediu Biotic		е			c		eo	ility		ation		ty	ability
Factor Fauna		ortan	_	Isity	nsio	lent	ister	ersib	ergy	Inmr	t	odici	overa
Subfactor PROTECTED NA	TURAL AREAS	lmpo	Sign	Inter	Exte	Mon	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Circulation and operation of	vehicles	0											
Presence of permanent facili	ities.	0											
Operation of the wind energy	y turbines	0											
Inadequate waste manageme	ent	0											
WIND ENERGY GENERATIO	N PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

								v		on			
						ility							
rtance		sity	Ision	ent	stence	rsibili	rgy	mulat	Ļ	dicity	verab		
Impo	Sign	Intens	Exten	Mome	Persi	Reve	Syne	Accu	Effect	Perio	Reco		
0													
0													
0													
0													
0													
0													
0													
	0         0           0         0           0         0           0         0           0         0           0         0           0         0	<ul> <li>sidu</li> <li>sidu<td>Image: state stat</td><td>Extension     0       Extension     0</td><td>Moment       Moment       Moment</td><td>Image: state stat</td><td>Image: constraint of the state of the s</td><td>0       0       1       0</td><td>0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       1       0       1       1       0       1</td><td>0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       1       0       1       0       1</td><td>0       0</td></li></ul>	Image: state stat	Extension     0       Extension     0	Moment       Moment	Image: state stat	Image: constraint of the state of the s	0       0       1       0	0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       1       0       1       1       0       1	0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       1       0       1       0       1	0       0		





Client. Vientos Neuquinos I S.A.

Impact N° 28.01	Subfactor Visual Impact
STAGE	CONSTRUCTION
Affectation Absolute percentage	5.82 %
Impacting Actions	Soil Movement Construction of permanent facilities. Grubbing and clearance of the site Filling, leveling, scarification activity and re planting. Inadequate waste management
Location.	Project Area
Impacts.	Landscape affectation
Description of impacts	The negative affectation of the visual perception will be due to soil movement activities (airborne dust), grubbing and clearing of the site ( airborne dust) and the construction work of permanent facilities which, given the location of the project, will only be perceived by occasional passers-by (rural posts) Inadequate waste management may produce wind-blowing of bags and papers which are dispersed in the surrounding deteriorating the landscape resource of the site. Filling, leveling, scarification and re planting tasks will mitigate the emission of particulate material once the work has finished.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Moisten roads and work areas. Stockpile domestic waste in containers with lids and a net to avoid their spreading and wind-blow.
Description of Mitigation Measures	None
Priority	Low
Expected Effectiveness	Low



Author Scudelati	& Asociados S.R.L

Impact N° 28.02	Subfactor Visual Impact
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	9.86 %
Impacting Actions	Inadequate waste management Presence of permanent facilities.
Location.	Project Area
Impacts.	Affectation over air traffic Affectation of visual perception (rural settlers and occasional passers-by) by the presence of the Wind Energy Park.
Description of impacts	Landscape perception is estimated as subjective from the aesthetic point of view, something that may result disturbing for some, may result nice for others. However, for the analysis its affectation has been considered negative for those who pass by in the surroundings of the Wind Project. According to this, it is related to: - presence, height, number and distribution of wind energy turbines. - permanent facilities - blade rotation speed. - color. The affectation over air traffic will be related to the height and color of the wind turbines. If it is similar to the context, it will be difficult to be seen with the potential risk of accidents. The affectation over passers-by and occasional rural settlers may potentially be due to disturbances caused by the solar reflection originated by the wind turbine surface characteristics. Even though waste generation will be low, inadequate management will generate and affect negatively on the landscape.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Implement a Waste Management Procedure
Description of Mitigation Measures	Keep the beaconing system in the towers to avoid air traffic accidents. Blade extreme points must be painted with reflective paint that enable the visualization for birds and airplanes. Anti reflex paint should be used in the blades to reduce their reflection in very bright days.
Priority	Medium
Expected Effectiveness	High



Impact N° 28.03	Subfactor Visual Impact
STAGE	DEPARTURE
Affectation Absolute percentage	2.41 %
Impacting Actions	Dismantling of the wind turbines. Filling, leveling, scarification activity and re planting. Inadequate waste management Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	Landscape affectation over air traffic Affectation of visual perception (rural settlers and occasional passers- by) by the presence of the Wind Energy Park. Affectation over road traffic
Description of impacts	The affectation over visual perception will be due to wind turbine dismantling activities, demolition and moving permanent facilities away, circulation and operation of vehicles and all the work related to the restoration of the Area to its original conditions. This will be compensated by the filling, leveling and scarification tasks of the site tending to the recovering of its original characteristics. The affectation over air traffic, bird life, population and traffic is considered positive, due to the absence of permanent facilities and the dismantling of wind turbines. As in the Construction Stage, inadequate waste management will affect the subfactor negatively.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Implement a Waste Management Program
Description of Mitigation Measures	Does not apply
Priority	Medium
Expected Effectiveness	Medium

''''	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 28 Visual Impact					Vientos Neuquinos							
Client. Vientos	Neuquinos I S.A.										EIA P	EBC	001/14
Author Scudela	ati & Asociados S.R.L									ww	/w.scu	delati.	com.ar
System	Physical Natural												
Mediu	Perceptive	e			_		се	lity		ation		N.	bility
Factor	Landscape	ortano		isity	nsior	ent	isten	ersibi	ergy	Imula	Ħ	odicit	vera
Subfactor	Visual Incidence		Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effec	Peric	Reco
Soil Movement		-19	-1	2	1	4	1	1	1	1	1	1	1
Circulation and operation of vehicles		0											

-33

<mark>-26</mark> -1

23 1

-23

-1

-1

	Individual Affectation Matrix Construction Stage												
System	Physical Natural												
Mediu	Perceptive	се			L		eor	ility		ation		ty	ability
Factor	Landscape	ortan	_	ısity	nsio	nent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor	Visual Incidence	Impo	Sign	Inter	Exte	Non	Pers	Rev	Syne	Accı	Effe	Peri	Rec
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	-56	-1	8	4	4	4	4	1	1	4	4	2
Operation of the wind energy turbines		0											
Inadequate waste management		-14	-1	1	1	2	1	1	1	1	1	1	1
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

Operation of electric generator equipment

Filling, leveling and scarification process.

Construction of permanent facilities.

Grubbing and clearance of the site

Inadequate waste management

Soil Compacting

.111	Environmental Wind Energy Neuquinos I File 2	Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 28 Visual Impact					
Client. Vientos	ntos Neuquinos I S.A. EIA PE						
Author Scude	Jelati & Asociados S.R.L www.scude						

System	Physical Natural												
Mediu	Perceptive	0					e	ty		ion			ility
Factor	Landscape	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Visual Incidence	Impo	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling of the wind turbines.		53	1	8	4	4	4	4	1	1	4	1	2
Circulation and operation of vehicles		0											
Filling, leveling and scarification process.		25	1	1	2	1	4	1	2	1	4	1	4
Inadequate	vaste management	-26	-1	2	1	4	2	1	1	1	4	4	1
WIND ENERGY GENERATION PROCESS													
Demolition/withdrawal of foundations and permanent installations.		-29	-1	2	2	2	4	2	1	1	1	4	4
Unemployment		0											





Client. Vientos Neuquinos I S.A.

Impact N° 29.01	Subfactor Personnel Health
STAGE	CONSTRUCTION
Affectation Absolute percentage	8.95 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Construction of permanent facilities. Grubbing and clearing of the site Filling, leveling, scarification activity and re planting. Soil Compacting
Location.	Project Area
Impacts.	Affectation over personnel health
Description of impacts	<ul> <li>Negative affectation over personnel health will be due to: <ul> <li>diffuse emissions of particulate material (airborne dust), caused by soil movement, circulation and operation of vehicles, permanent facility constructions, grubbing and clearing of the site, filling, leveling and re planting tasks and soil compacting. The absence of elements of personal protection (EPP) may potentially cause respiratory diseases.</li> <li>the generation of noise from the use of tools, equipment and heavy vehicles, which may potentially produce hearing problems if the personnel does not use the corresponding elements of personal protection (EPP)</li> <li>the excessive exposure to climatic agents that may provoke stress by heat o cold, dehydration or sunburns.</li> <li>potential stings and bites caused by animals like snakes, spiders, rodents, scorpions, that might cause from allergic reactions to death.</li> <li>potential accidents produced during the circulation and operation of vehicles.</li> <li>falls from high points.</li> <li>getting trapped in confined spaces (foundation excavations and trenches for wiring).</li> <li>Electric choke by working with energized tools or equipment.</li> <li>consumption of non-potable water .</li> </ul></li></ul>
	Preventing and Mitigation Measures.
Description of Prevention Measures	Placement of risk signs and posters at the entrance/exit of access roads of the Area of the Project. Placement of posters with occupational risks in all the work. Occupational medical tests should be done to the personnel to evaluate their tolerance to work in heights (example: vertigo) Provide Elements of Personal Protection according occupational risks, and train the staff in their use and safety procedures in work. There must be Hot Process Solutions. There must be a Safety Plan approved by the ART for permanent staff and contractors. There must be a person in charge of occupational safety during the whole work There must be potable water and restrooms in adequate conditions for the personnel.
Description of Mitigation Measures	Set up monitoring programs in the working environment for noise, PM10 and thermal stress. Conduct studies of drinking water every six months. There must be a Contingency Plan that considers the rescue of personnel injured in high-level structures and it must have the elements needed in case of lesions by fall from high-level places or electric choke.
Expected Effectiveness	Medium



### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 29- Personnel



Client. Vientos Neuquinos I S.A.

Impact N° 29.02	Subfactor Personnel Health
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	8.17 %
Impacting	Circulation and operation of vehicles
Actions	Operation of the wind energy turbines
Location.	Project Area
Impacts.	Affectation over personnel health
Description of impacts	<ul> <li>Negative affectation over personnel health will be due to:</li> <li>noise produced by wind turbines.</li> <li>excessive exposure to climatic agents that may provoke stress by heat o cold, dehydration or sunburns.</li> <li>potential stings and bites caused by animals like snakes, spiders, rodents, scorpions, that might cause from allergic reactions to death.</li> <li>potential accidents produced during the circulation and operation of vehicles.</li> <li>falls from high places.</li> <li>Electric choke by working with energized tools or equipment.</li> <li>consumption of non-potable water .</li> </ul>
	Preventing and Mitigation Measures.
Description of Prevention Measures	Placement of risk signs and posters at the entrance/exit of access roads of the Area of the Project. Placement of posters with occupational risks. There must be a Map of Occupational Risks identifying the most risky zones. Occupational medical tests should be done to the personnel to evaluate their tolerance to work in heights (example: vertigo) Provide Elements of Personal Protection according occupational risks, and train the staff in their use and safety procedures in work. There must be Hot Process Solution Procedure. There must be a Safety Plan approved by the ART for permanent staff and contractors. There must be a person in charge of occupational safety. Provide drinking water for the personnel.
Description of	Set up a monitoring plan in the working environment that includes the
Mitigation	parameters of noise and lightning
Measures	Conduct studies of drinking water every six months.
Priority	High
Expected Effectiveness	Medium





Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

Impact N° 29.03	Subfactor Personnel Health
STAGE	DEPARTURE
Affectation Absolute percentage	10.79 %
Impacting Actions	Dismantling of the wind turbines. Circulation and operation of vehicles Filling, leveling, scarification activity and re planting. Demolition/withdrawal of foundations and permanent installations.
Location.	Project Area
Impacts.	Affectation over personnel health
Description of	Personnel health affectation will be due to tasks similar to those in the
impacts	activities of the Construction Stage.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Idem CONSTRUCTION STAGE
Description of Mitigation Measures	Idem CONSTRUCTION STAGE
Priority	High
Expected Effectiveness	Medium

System	Socioeconomic	Importance	Sign	Intensity	Extension	Moment	Persistence	Reversibility	Synergy	Accumulation	Effect	Periodicity	Recoverability
Mediu	Socioeconomic												
Factor	Personnel												
Subfactor	Personnel Health												
Soil Movement		-28	-1	4	2	4	1	2	1	1	1	1	1
Circulation and operation of vehicles		-22	-1	2	2	4	1	2	1	1	1	1	1
Operation of electric generator equipment		0											
Construction of permanent facilities.		-28	-1	4	2	4	1	2	1	1	1	1	1
Grubbing and clearance of the site		-14	-1	1	1	2	1	1	1	1	1	1	1
Filling, leveling and scarification process.		-16	-1	1	1	4	1	1	1	1	1	1	1
Inadequate waste management		0											
Soil Compacting		-14	-1	1	1	2	1	1	1	1	1	1	1

Individual Affectation Matrix Construction Stage



System	Socioeconomic	Importance	Sign	Intensity	Extension	Moment	Persistence	Reversibility	Synergy	Accumulation	Effect	Periodicity	Recoverability
Mediu	Socioeconomic												
Factor	Personnel												
Subfactor	Personnel Health												
Circulation and operation of vehicles		-20	-1	2	1	2	1	4	1	1	1	1	1
Presence of permanent facilities.		0											
Operation of the wind energy turbines		-38	-1	1	4	4	4	4	2	1	4	4	4
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic	Importance	Sign	Intensity	Extension	ent	stence	Reversibility	Synergy	Accumulation		Periodicity	Recoverability
Mediu m·	Socioeconomic												
Factor	Personnel										Effect		
Subfactor	Personnel Health					Mom	Persi						
Dismantling of the wind turbines.		-28	-1	4	2	4	1	2	1	1	1	1	1
Circulation and operation of vehicles		-22	-1	2	2	4	1	2	1	1	1	1	1
Filling, leveling and scarification process.		-16	-1	1	1	4	1	1	1	1	1	1	1
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		-28	-1	4	2	4	1	2	1	1	1	1	1
Unemployment		0											




Client. Vientos Neuquinos I S.A.

Impact N° 30.01	Subfactor Direct and indirect employment				
STAGE	CONSTRUCTION				
Affectation Absolute percentage	11.86 %				
Impacting Actions	Soil Movement Circulation and operation of vehicles Construction of permanent facilities Grubbing and clearing of the site Filling, leveling, scarification activity and re planting. Soil Compacting				
Location.	Project zone affected				
Impacts.	Affectation over the generation of temporary indirect employment opportunities Affectation over the generation of permanent direct employment opportunities				
Description of impacts	It is a cumulative impact with positive characteristics. The affectation over the generation of temporary indirect employment opportunities will be due to the tasks that involve contractor companies for soil movement, operations involving vehicles, permanent facility construction, filling, leveling and scarification activities, and soil compacting. Its influence over employment in the region will be positive for the increase in the demand of qualified manpower (engineers, consultants and investigators) and non qualified (building and transport sectors) Its influence over the improvement in the employment index of the zone will be medium. In this stage, affectation over the generation of permanent direct employment is related to the Project Management Personnel. Its influence over the improvement in the employment index of the zone will be low.				
Preventing and Mitigation Measures.					
Description of Prevention Measures	None				
Description of Mitigation Measures	None				
Priority	Does not apply				
Expected	Does not apply				

.111	Environmental I Wind Energy P Neuquir	mpact Study Park Vientos nos I	Vientos Neuquinos
Client. Vientos	Neuquinos I S.A.		EIA PEBC 001/14
Author Scudela	ati & Asociados S.R.L		www.scudelati.com.ar

Impact N° 30.02	Subfactor Direct and indirect employment					
STAGE	OPERATION AND MAINTENANCE					
Affectation Absolute percentage	12.68 %					
Impacting Actions	Circulation and operation of vehicles Operation of the wind energy turbines Wind energy generation use					
Location.	Project zone affected					
Impacts.	Affectation over the generation of temporary indirect employment opportunities Affectation over the generation of permanent direct employment opportunities					
Description of impacts	It is a cumulative impact with positive characteristics. Affectation over the generation of temporary indirect employment opportunities will be due to eventual tasks of maintenance and operation. In this section is included the generation of employment opportunities of companies specialized in the service of wind energy parks. Affectation over permanent direct employment opportunities is related to the Management Personnel of the Project and those employees that perform operation and maintenance tasks. In both cases the influence over the improvement in the employment index of the zone will be low. The use of wind energy will enable to diversify and consolidate the energetic matrix in the region enabling the installation and growth of the industrial sector with the generation of new employment opportunities.					
Preventing and Mitigation Measures.						
Description of Prevention Measures	None					
Description of Mitigation Measures	None					
Priority	Does not apply					
Expected Effectiveness	Does not apply					

.111	Environmental I Wind Energy P Neuquir	Environmental Impact Study Wind Energy Park Vientos Neuquinos I					
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14				
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar				

Impact N° 30.03	Subfactor Direct and indirect employment
STAGE	DEPARTURE
Affectation Absolute percentage	7.23 %
Impacting Actions	Dismantling of the wind turbines. Circulation and operation of vehicles Filling, leveling, scarification activity and re planting. Demolition/withdrawal of foundations and permanent installations. Unemployment
Location.	Project zone affected
Impacts.	Affectation over the generation of temporary indirect employment opportunities Affectation over the generation of permanent direct employment opportunities
Description of impacts	The affectation over the generation of temporary indirect employment opportunities will be due to tasks that involve contractor companies for the dismantling of the wind turbines, moving permanent facilities and electric lines away, the demolition and withdrawal of foundations. Its influence over employment over the region will be a positive one for the increase in manpower demand. As in the Construction Stage, it is expected medium affectation over the index of employment in the area. Given that project development implies the development of local /regional service providers, even though it is understood that their work will be reduced by the closure of the wind park, the know-how acquired will enable the personnel to develop commercial actions in other sites of the country or province. The finishing of the Project will generate unemployment of qualified manpower. Given that the region has other economic activities, work positions will be reorganized and the effect will be dimmed.
	Preventing and Mitigation Measures.
Description of Prevention Measures	None
Description of Mitigation Measures	None
Priority	Does not apply
Expected Effectiveness	Does not apply

	Environmental Impact Study Wind Energy Park Vientos Neuquinos I	Vientos Neuquinos
Client. Vientos Neuquinos	I S.A.	EIA PEBC 001/14
Author Scudelati & Asocia	idos S.R.L	www.scudelati.com.ar

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System	Socioeconomic												
Mediu	Socioeconomic	e			۲		e	ility		ation		Ĺ	bility
Factor	Personnel	ortan		nsity	nsio	lent	isten	ersibi	ergy	Inmr	st	odici	overa
Subfactor	Direct and indirect employment	Impo	Sign	Inter	Exte	Morr	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Soil Movement		26	1	1	4	4	1	1	2	1	1	4	1
Circulation and operation of vehicles		29	1	1	4	4	1	1	2	1	4	4	1
Operation of electric generator equipment		0											
Construction of permanent facilities.		26	1	1	4	4	1	1	2	1	1	4	1
Grubbing and clearance of the site		26	1	1	4	4	1	1	2	1	1	4	1
Filling, leveling and scarification process.		26	1	1	4	4	1	1	2	1	1	4	1
Inadequate waste management		0											
Soil Compacting		26	1	1	4	4	1	1	2	1	1	4	1

### Individual Affectation Matrix Construction Stage

System	Socioeconomic												
Mediu	Socioeconomic	се			c		ce	ility		ation		ty	bility
Factor	Personnel	ortan		Isity	nsio	lent	ister	ersib	ergy	Inmr	t	odici	overa
Subfactor	Direct and indirect employment	Impo	Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effe	Perio	Reco
Circulation	and operation of vehicles	30	1	2	4	4	2	2	1	1	1	4	1
Presence of permanent facilities.		0											
Operation of the wind energy turbines		30	1	2	4	4	2	2	1	1	1	4	1
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		30	1	2	4	4	2	2	1	1	1	4	1

Individual Affectation Matrix Operation and Maintenance Stage

.111	Environmental lı Wind Energy P Neuquir	mpact Study ark Vientos nos I	Vientos Neuquinos
Client. Vientos	Neuquinos I S.A.		EIA PEBC 001/14
Author Scudel	ati & Asociados S.R.L		www.scudelati.com.ar

System	Socioeconomic												
Mediu m:	Socioeconomic	0					e	ty		ion			ility
Factor	Personnel	rtance		sity	sion	ent	stenc	rsibili	rgy	mulat	÷	dicity	verab
Subfactor	Direct and indirect employment	Impo	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	26	1	1	4	4	1	1	2	1	1	4	1
Circulation and operation of vehicles		26	1	1	4	4	1	1	2	1	1	4	1
Filling, leveling and scarification process.		26	1	1	4	4	1	1	2	1	1	4	1
Inadequate waste management		0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		26	1	1	4	4	1	1	2	1	1	4	1
Unemployment		-41	-1	4	4	4	4	2	1	1	4	4	1





Client. Vientos Neuquinos I S.A. Author Scudelati & Asociados S.R.L

Impact N° 31.01	Subfactor Disturbing noises for the neighborhood.
STAGE	CONSTRUCTION
Affectation Absolute percentage	2.83 %
Impacting Actions	Soil Movement Circulation and operation of vehicles
Location.	Rural Post near the area of the Project.
Impacts.	Affectations over the health of nearby population
Description of impacts	Sound emissions of operating vehicles will cause distrubances for those who live in the rural post near the area of the project.
	Preventing and Mitigation Measures.
Description of Prevention Measures	Monitor noise disturbances for the neighborhood as Base Line prior to the beginning of the work, and if needed by environmental authority, during its execution.
Description of Mitigation Measures	None
Priority	Low
Expected Effectiveness	High

Impact N° 31.02	Subfactor Disturbing noises for the neighborhood.
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	5.77 %
Impacting Actions	Operation of the wind energy turbines
Location.	Rural Post near the area of the Project.
Impacts.	Affectations over the health of nearby population
Description of impacts	Sound emissions will affect in a limited way the health of the people nearby, given that, as has been observed in the field study, there is only one house that is occasionaly inhabited near the surroundings of the wind energy turbines.
	Preventing and Mitigation Measures.
Description of Preventing Measures	If required by environmental authority, monitor the neighborhood for disturbing noises regularly. Dispose a Maintenance Plan that avoids the generation of noise by mechanic source.
Description of Mitigation Measures	None
Priority	High
Expected Effectiveness	High

.111	Environmental Ir Wind Energy P Neuquir	mpact Study ark Vientos nos I	Vientos Neuquinos
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar

Impact N° 31.03	Subfactor Disturbing noises for the neighborhood.
STAGE	DEPARTURE
Affectation Absolute percentage	4.71 %
Impacting Actions	Wind energy generation use
Location.	Rural Post near the area of the Project.
Impacts.	Affectations over the health of nearby population
Description of	The closure of the Wind Energy Park implies the suspension of the
impacts	generation of disturbing noises, being this a positive affectation.
	Preventing and Mitigation Measures.
Description of Preventing Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply

System	Socioeconomic												
Mediu	Socioeconomic						Ċ)	Reversibility		uo			lity
Factor	Nearby Population's Health	ance		ity	Extension	Moment	Persistence		Synergy	nulati		icity	erabi
Subfactor	Disturbance noises to the neighborhood (IRAM 4062)	Import	Sign	Intensi						Accum	Effect	Period	Recov
Soil Movement		-19	-1	2	2	2	1	1	1	1	1	1	1
Circulation and operation of vehicles		-19	-1	2	2	2	1	1	1	1	1	1	1
Operation of electric generator equipment		0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		0											
Soil Compac	ting	0											



Author Scudelati & Asociados S.R.L

System	Socioeconomic												oility
Mediu	Socioeconomic	e					e	ity		tion			
Factor	Nearby Population's Health	tanc		sity	sion	ent	stenc	sibil'	gy	nula		dicity	verak
Subfactor	Disturbance noises to the neighborhood (IRAM 4062)	Impor	Sign	Inten	Exter	Mome	Persi	Revei	Synei	Accu	Effect	Perio	Reco
Circulation and operation of vehicles		0											
Presence o	f permanent facilities.	0											
Operation of	of the wind energy turbines	-41	-1	2	4	4	4	4	2	1	4	4	4
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic												
Mediu m <sup>.</sup>	Socioeconomic						e	ty		ion			ility
Factor	Nearby Population's Health	rtance		Intensity	Extension	Moment	Persistence	Reversibili	Synergy	Accumulat	t	dicity	verab
Subfactor	Disturbance noises to the neighborhood (IRAM 4062)	Import Sign	Sign								Effect	Perio	Recov
Dismantling	of the wind turbines.	41	1	4	4	4	1	1	2	1	4	4	4
Circulation and operation of vehicles		0											
Filling, level	ing and scarification process.	0											
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											





Client. Vientos Neuquinos I S.A.

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Impact N° 32.01	Subfactor File 32- Other affectations over the
STAGE	CONSTRUCTION
Affectation Absolute percentage	3.50 %
Impacting Actions	Soil Movement Circulation and operation of vehicles
Location.	Rural Post near the area of the Project.
Impacts.	Affectations over the health of nearby population
Description of impacts	The negative affectation over the health of rural settlers contiguous to the Area of the Project will be due to the generation of diffuse emissions of particulate material during the working tasks.
P	reventing and Mitigation Measures.
Description of Preventing Measures	Risk signs and posters should be placed at the entrance/exit of access roads of the Area of the Project. Placement of road signs (circulation maximum speed) Moisten roads during summer.
Description of Mitigation Measures	None
Priority	Low
Expected Effectiveness	Medium





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Client. Vientos Neuquinos I S.A.

Impact N° 32.02	Subfactor File 32- Other affectations over the population's
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute	5 77 %
percentage	
Impacting Actions	Operation of the wind energy turbines
Location.	Affectations over the health of nearby population Affectation
Impacts.	over air traffic
	Affectation over the landscape Affectation over Quality of Life
Description of impacts	The affectation over the health of the population nearby will be due to the flickering shadow over the rural settlers that may occasionally live near the area of the project. Even though the area of the project is already affected in the landscape by electric lines, the Wind Energy Park will affect visual perception contiguous to the area of the project. This is a relative affectation given that the facilities may result of touristic interest for some, for others they may result as a modification of the original situation of the environment. As mentioned before, this affectation will only be perceived by occasional settlers of the rural post. The affectation over air traffic will be related to the height and color of the wind turbines. If it is similar to the context, it will be difficult to be seen with the potential risk of accidents. The affectation over Quality of Life due to the use of sustainable sources (like the wind) will be due to the reduction of greenhouse effect gases. Given that it is a global affectation impact, it will exceed the range of the population near the Project.
	Preventing and Mitigation Measures
Description of	
Preventing Measures	None
Description of Mitigation Measures	There must be a maintenance system for tower beaconing. The facilities must be painted with colors that enable their integration in the landscape. The ends of the blades must be painted with reflective paint that enable them to be seen by airplanes and the rest with anti-reflective paint coating to reduce their effect in extremely bright days.
Priority	High
Expected Effectiveness	High





Client. Vientos Neuquinos I S.A.

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Impact N° 32.03	Subfactor File 32- Other affectations over the
STAGE	DEPARTURE
Affectation Absolute percentage	1.03 %
Impacting Actions	Wind energy generation use
Location.	Rural Post near the area of the Project.
Impacts.	Affectations over the health of nearby population Affectation over the landscape Affectation over road traffic Affectation over air traffic Affectation over Quality of Life
Description of impacts	During working tasks the affectation over the nearby population will have similar causes and effects that those indicated for the Construction Stage. The affectation over Quality of Life will have a negative effect due to the closure of the Wind Energy Park which will potentially reduce the use of an alternative sustainable source of energy. Dismantling and closure tasks will imply the elimination of affectation sources over the visual perception, vehicle and air traffic.
	Preventing and Mitigation Measures.
Description of Preventing Measures	Risk signs and posters should be placed at the entrance/exit of access roads of the Area of the Project. Placement of road signs (circulation maximum speed) Moisten roads during summer.
Description of Mitigation Measures	None
Priority	Medium
Expected Effectiveness	Medium

System	Socioeconomic												
Mediu	Socioeconomic					4	ence	ibility	V	uo			lity
Factor	Nearby Population's Health	ance		ity	sion					ulati		icity	erabi
Subfactor	Other affectations over the population´s health	Import	Sign	Intensi	Extens	Momei	Persis	Revers	Synerç	Accum	Effect	Period	Recov
Soil Movement		-19	-1	2	2	2	1	1	1	1	1	1	1
Circulation and operation of vehicles		-28	-1	4	2	4	1	2	1	1	1	1	1
Operation of electric generator equipment		0											
Constructior	of permanent facilities.	0											
Grubbing an	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
Inadequate waste management		0											
Soil Compacting		0											
	Individual Affectation N	latrix	( Coi	nstru	ictio	n Sta	age	1	1	1	1		

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#### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 32- Other affectations over the population's health



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Author Scudelati & Asociados S.R.L

System	Socioeconomic												
Mediu	Socioeconomic	е					e	ity		tion		-	oility
Factor	Nearby Population's Health	tanc		sity	sion	ent	stenc	'sibil	gy	mula		dicity	veral
Subfactor	Other affectations over the population's health	0 Importa	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effect	Perio	Reco
Circulation and operation of vehicles		0											
Presence c	f permanent facilities.	0											
Operation of the wind energy turbines		-41	-1	2	4	4	4	4	2	1	4	4	4
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic												
Mediu m <sup>.</sup>	Socioeconomic	0					е	ťy		ion		_	ility
Factor	Nearby Population's Health	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat		dicity	verab
Subfactor	Other affectations over the population s health	Impoi	Sign	Inten	Exten	Mome	Persi	Rever	Synei	Accu	Effect	Perio	Recov
Dismantling of the wind turbines.		41	1	4	4	4	1	1	2	1	4	4	4
Circulation and operation of vehicles		0											
Filling, level	ing and scarification process.	0											
Inadequate v	waste management	0											
WIND ENERGY GENERATION PROCESS		-50	-1	4	8	2	4	4	2	1	4	4	1
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											



### Environmental Impact Study Wind Energy Park Vientos Neuquinos I File 33- Economic



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Client. Vientos Neuquinos I S.A.

Impact N° 33.01	Subfactor Economic Activity
STAGE	CONSTRUCTION
Affectation Absolute percentage	13.42 %
Impacting Actions	Soil Movement Circulation and operation of vehicles Construction of permanent facilities. Grubbing and clearance of the site Filling, leveling and scarification process. Soil Compacting
Location.	Project zone affected
Impacts.	Product consumption Service consumption
Description of impacts	It is a cumulative impact with positive characteristics. Supply and service consumption for the construction of the Park will increase personnel entrance from contractors' companies with the indirect increase of their capacity of purchasing power. Local workers will potentially move to the Area of the Project impacting over the gastronomic industry and supermarkets. The demand of hotels and hosting places for the personnel will also increase. These affectations will impact over the closest population (Piedra del Águila)
Р	reventing and Mitigation Measures.
Description of Preventing Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply



Impact N° 33.02	Subfactor Economic Activity
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	16.90 %
Impacting Actions	Circulation and operation of vehicles Operation of the wind energy turbines Wind Energy generation use
Location.	Project zone affected
Impacts.	Product consumption Service consumption
Description of impacts	It is a cumulative impact with positive characteristics. Supply and service consumption for the construction of the Park will increase personnel entrance from contractors' companies with the indirect increase of their capacity of purchasing power. Given that the Area of the Project is used for farming, this activity will get along with the activity of the Wind Energy Park without any inconveniences. The use of Wind Energy sources will enhance the energetic matrix of the province and the region substituting imports and enabling the local industrial development associated to it.
P	reventing and Mitigation Measures.
Description of Preventing Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply

	Environmental Ir Wind Energy P Neuquinos I File 3	npact Study ark Vientos 33- Economic	Vientos Neuquinos					
Client. Vientos	s Neuquinos I S.A.		EIA PEBC 001/14					
Author Scude	lati & Asociados S.R.L		www.scudelati.com.ar					

Impact N° 33.03	Subfactor Economic Activity
STAGE	DEPARTURE
Affectation Absolute percentage	9.30 %
Impacting Actions	Dismantling of the wind turbines. Demolition/moving away foundations and permanent installations. Filling, leveling, scarification activity and re planting. Circulation and operation of vehicles Unemployment
Location.	Project zone affected
Impacts.	Product consumption Service consumption
Description of impacts	The execution of departure works will imply direct consumption of supplies and services. Unemployment will be one effect of the Park closure (losing the purchase power capacity of those related to the project) and it will affect negatively in the energetic matrix of the region, particularly over Piedra del Águila.
Р	reventing and Mitigation Measures.
Description of Preventing Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Person in charge of measures	Does not apply

System	Socioeconomic												,
Mediu	Socioeconomic	e			c		e	ility		ation		Ĺ	bility
Factor	Society	ortan		nsity	nsio	lent	isten	ersibi	ergy	Inmu	t	odici	overa
Subfactor	Economic Activity	Impo	Sign	Inter	Exte	лоМ	Pers	Reve	Syne	Acci	Effe	Perio	Reco
Soil Movement		32	1	2	4	4	1	1	2	1	4	4	1
Circulation and operation of vehicles		29	1	1	4	4	1	1	2	1	4	4	1
Operation of electric generator equipment		0											
Construction	of permanent facilities.	32	1	2	4	4	1	1	2	1	4	4	1
Grubbing and	d clearance of the site	29	1	1	4	4	1	1	2	1	4	4	1
Filling, leveling and scarification process.		29	1	1	4	4	1	1	2	1	4	4	1
Inadequate waste management		0											
Soil Compac	ting	29	1	1	4	4	1	1	2	1	4	4	1



System	Socioeconomic												>
Mediu	Socioeconomic	се			5		ce	ility		ation		ty	ability
Factor	Society	ortan		nsity	ensio	lent	ister	ersib	ergy	nmu	t	odici	overa
Subfactor	Economic Activity	Impo	Sign	Inter	Exte	Mon	Pers	Rev	Syne	Acci	Effe	Peri	Rec
Circulation	and operation of vehicles	35	1	2	4	4	4	4	2	1	1	4	1
Presence of permanent facilities.		0											
Operation of the wind energy turbines		35	1	2	4	4	4	4	2	1	1	4	1
Inadequate waste management													
WIND ENERGY GENERATION PROCESS			1	4	8	2	4	4	2	1	4	4	1

Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic												
Mediu m·	Socioeconomic	0					е	ty		ion			ility
Factor	Society	rtance		sity	sion	ent	stenc	rsibili	ß,	mulat		dicity	verab
Subfactor	Economic Activity	oduuj	Sign	Inten	Exter	Mome	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	32	1	2	4	4	1	1	2	1	4	4	1
Circulation and operation of vehicles		29	1	1	4	4	1	1	2	1	4	4	1
Filling, leveli	ng and scarification process.	29	1	1	4	4	1	1	2	1	4	4	1
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		32	1	2	4	4	1	1	2	1	4	4	1
Unemploym	ent	-41	-1	4	4	4	4	2	1	1	4	4	1





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Client. Vientos Neuquinos I S.A.

Impact N° 34.01	Subfactor Cultural Heritage
STAGE	CONSTRUCTION
Affectation Absolute percentage	2.09 %
Impacting Actions	Soil Movement
Location.	Project Area
Impacts.	Affectation over the archaeological heritage Affectation over the paleontological heritage
Description of impacts	Given that the area of the project is located in a region with an important anthropic affectation (farming activities and farmhouses) this sub factor is not much vulnerable.
Р	reventing and Mitigation Measures.
Description of Preventing Measures	Communication procedures and standstill of the work before an archaeological and/or paleontological finding. Train own and contracted personnel about specific procedures. Do not rescue occasional findings.
Description of	Prior to the beginning of the Construction Stage conduct an
Mitigation Measures	archaeological and paleontological Base Line Study
Priority	High
Expected Effectiveness	Medium

System	Socioeconomic												
Mediu	Socioeconomic	е			Ę		e	ility		ation		ťy	bility
Factor	Society	ortan		nsity	nsiol	lent	isten	ersibi	ergy	Inm	t	odicit	overa
Subfactor	Cultural Heritage	Impo Sign		Inter	Exte	Mon	Pers	Reve	Syne	Accı	Effec	Peri	Reco
Soil Movement		-28	-1	4	2	4	1	2	1	1	1	1	1
Circulation and operation of vehicles		0											
Operation of electric generator equipment		0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		0											
Soil Compacting		0											

Individual Affectation Matrix Construction Stage





Client. Vientos Neuquinos I S.A. Author Scudelati & Asociados S.R.L

Impact N° 35.01	Subfactor Electric Infrastructure							
STAGE	CONSTRUCTION							
Affectation Absolute percentage	2.16 %							
Impacting Actions Construction of permanent facilities.								
Location.	Project zone affected							
Impacts.	Affectation over Quality of Life Affectation over Employment							
Description of impacts	The construction of the connection point with the LHT will affect operative tasks sporadically. This will be a temporary affectation and it will be reverted once the tasks have finished.							
	Preventing and Mitigation Measures.							
Description of Preventing Measures	None							
Description of Mitigation Measures	None							
Priority	Does not apply							
Expected Effectiveness	Does not apply							

Impact N° 35.02	Subfactor Electric Infrastructure
STAGE	OPERATION AND MAINTENANCE
Affectation Absolute percentage	7.04 %
Impacting Actions	Operation of the wind energy turbines
Location.	Project zone affected
Impacts.	Affectation over Quality of Life Affectation over Employment
Description of impacts	The affectation over Quality of Life due to the use of sustainable sources (like the wind) will be due to the reduction of greenhouse effect gases. Given that it is a global affectation impact, it will exceed the range of the population near the Project. The improvement in the energetic matrix by the use of renewable sources will enable the development of other companies and the generation of new working positions.
	Preventing and Mitigation Measures.
Description of Preventing Measures	Does not apply
Description of Mitigation Measures	Does not apply
Priority	Does not apply
Expected Effectiveness	Does not apply





Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

Impact N° 35.03	Subfactor Electric Infrastructure							
STAGE	DEPARTURE							
Affectation Absolute percentage	5.74 %							
Impacting Actions	Dismantling of the wind turbines.							
Location.	Project zone affected							
Impacts.	Affectation over Quality of Life							
Description of impacts	The affectation over Quality of Life will have a negative effect due to the closure of the Wind Energy Park which will potentially reduce the use of an alternative sustainable source of energy.							
	Preventing and Mitigation Measures.							
Description of Preventing Measures	None							
Description of Mitigation Measures	None							
Priority	Does not apply							
Expected Effectiveness	Does not apply							

System	Socioeconomic												
Mediu	Socioeconomic	e			۲		e	ility		ation		ty	bility
Factor	Infrastructure	ortan		nsity	nsio	lent	isten	ersibi	ergy	Inmr	ct	odici	overa
Subfactor	Electric	lmpo	Sign	Inter	Exte	Mom	Pers	Reve	Syne	Accı	Effe	Peri	Reco
Soil Moveme	nt	0											
Circulation and operation of vehicles													
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	-29	-1	1	4	4	1	1	1	4	4	2	1
Grubbing an	d clearance of the site	0											
Filling, leveli	ng and scarification process.	0											
Inadequate waste management		0											
Soil Compac	ting	0											



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System	Socioeconomic									_			(
Mediu	Socioeconomic	ce			2		eou	ility		ation		ty	ability
Factor	Infrastructure	ortan	_	nsity	nsio	lent	ister	ersib	ergy	Inmu	ct	odici	overa
Subfactor	Electric	lmpq	Sign	Intei	Exte	Mon	Pers	Rev	Syne	Acc	Effe	Peri	Reco
Circulation	and operation of vehicles	0											
Presence o	f permanent facilities.	0											
Operation (	of the wind energy turbines	50	1	4	8	2	4	4	2	1	4	4	1
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

## Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic												
Mediu m <sup>.</sup>	Socioeconomic	0					е	ťy		ion			ility
Factor	Infrastructure	rtance		sity	sion	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Electric	Impor	Sign	Inten	Exter	Mom	Persi	Reve	Syne	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	-50	-1	4	8	2	4	4	2	1	4	4	1
Circulation and operation of vehicles		0											
Filling, level	ng and scarification process.	0											
Inadequate v	vaste management	0											
WIND ENERGY GENERATION PROCESS		0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											





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Client. Vientos Neuquinos I S.A.

Impact N° 36.01	Subfactor Road Infrastructure								
STAGE	CONSTRUCTION								
Affectation Absolute percentage	2.16 %								
Impacting Actions	Circulation and operation of vehicles								
Location.	Direct Influence Zone of the Project								
Impacts.	Affectations over the health of the population near the roadways.								
Description of impacts	The negative affectation over the road traffic will generate risky situations in their path through the cities of the provinces of Buenos Aires, Río Negro and Neuquén by which the vehicles will transport the parts of the wind turbines.								
P	reventing and Mitigation Measures.								
Description of Preventing Measures	The transportation of wind turbines parts will be informed to the population in advance by the massive means of communication in the region.								
Description of Mitigation Measures	A plan to transport the equipment will be established together with the transportation authorities in order to avoid accident risks during the temporary transfer of the wind turbines								
Priority	High								
Expected Effectiveness	Medium								

Impact N° 36.02	Subfactor Road Infrastructure							
STAGE	OPERATION AND MAINTENANCE							
Affectation Absolute percentage	2.25 %							
Impacting Actions	Circulation and operation of vehicles							
Location.	Direct Influence Zone of the Project							
Impacts.	Affectations over the health of the population near the roadways.							
Description of impacts	The transportation of equipment and large spare parts for routine maintenance tasks may affect the transit flow in the roadways where they go through, increasing the risks of road accidents							
	Preventing and Mitigation Measures.							
Description of Preventing Measures	The transportation of wind turbines parts will be informed to the population in advance by the massive means of communication in the region.							
Description of Mitigation Measures	None							
Priority	High							
Expected Effectiveness	Medium							





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Client. Vientos Neuquinos I S.A.

Author Scudelati & Asociados S.R.L

Impact N° 36.03	Subfactor Road Infrastructure
STAGE	DEPARTURE
Affectation Absolute percentage	3.33 %
Impacting Actions	Circulation and operation of vehicles
Location.	Direct Influence Zone of the Project
Impacts.	Affectations over the health of nearby population Affectation over road traffic
Description of impacts	During working tasks the affectation over the nearby population will have similar causes and effects that those indicated for the Construction Stage.
	Preventing and Mitigation Measures.
Description of Preventing Measures	Idem CONSTRUCTION STAGE
Description of Mitigation Measures	Idem CONSTRUCTION STAGE
Priority	High
Expected Effectiveness	Medium

System	Socioeconomic												
Mediu	Socioeconomic	е			c		eo	ility		ation		ťy	bility
Factor	Infrastructure	ortan		Isity	nsiol	lent	isten	ersibi	ergy	Inmr	t	odicit	overa
Subfactor	Roads	Impo	Sign	Inter	Exte	Мот	Pers	Reve	Syne	Accı	Effec	Perie	Reco
Soil Moveme	nt	0											
Circulation and operation of vehicles		-29	-1	1	4	4	1	1	1	4	4	2	1
Operation of	electric generator equipment	0											
Construction	of permanent facilities.	0											
Grubbing an	d clearance of the site	0											
Filling, leveling and scarification process.		0											
Inadequate waste management		0											
Soil Compac	ting	0											



System	Socioeconomic												>
Medium	Socioeconomic	е			5		ce	ility		ation		ť	ability
Factor	Infrastructure	ortan	_	nsity	nsio	lent	ister	ersib	ergy	Inmu	t	odici	overa
Subfactor	Roads	Impo	Sign	Intei	Exte	Mon	Pers	Rev	Syn	Acc	Effe	Peri	Rece
Circulation	and operation of vehicles	-16	-1	1	1	4	1	1	1	1	1	1	1
Presence o	f permanent facilities.	0											
Operation of the wind energy turbines		0											
Inadequate waste management		0											
	RGY GENERATION PROCESS	0											

## Individual Affectation Matrix Operation and Maintenance Stage

System	Socioeconomic												
Mediu m <sup>.</sup>	Socioeconomic	0					е	ty		ion			ility
Factor	Infrastructure	rtance		sity	Ision	ent	stenc	rsibili	rgy	mulat	t	dicity	verab
Subfactor	Roads	Import	Sign	Inten	Exter	Mom	Persi	Rever	Synei	Accu	Effec	Perio	Reco
Dismantling	of the wind turbines.	0											
Circulation and operation of vehicles		-29	-1	1	4	4	1	1	1	4	4	2	1
Filling, level	ng and scarification process.	0											
Inadequate v	vaste management	0											
	GY GENERATION PROCESS	0											
Demolition/withdrawal of foundations and permanent installations.		0											
Unemploym	ent	0											