AERIUS CALCULATOR

Dit document bevat resultaten van een stikstofdepositieberekening met AERIUS Calculator. U dient dit document te gebruiken ter onderbouwing van een vergunningaanvraag in het kader van de Natuurbeschermingswet 1998.

De resultaten geven de stikstofeffecten van deze activiteit weer voor haar omgeving. Tot de omgeving behoren zowel Natura 2000-gebieden als beschermde natuurmonumenten. Calculator maakt enkel voor de PAS-gebieden inzichtelijk welke stikstofgevoelige habitattypen er voor komen en op welke hiervan een effect is. Op basis hiervan is aangegeven voor hoeveel hectares ontwikkelingsruimte benodigd is.

De berekening op basis van stikstofemissies gaat uit van de componenten ammoniak (NH3) en stikstofoxide (NOx), of één van beide. Hiermee is de depositie van de activiteit berekend en uitgewerkt.

Wilt u verder rekenen of gegevens wijzigen? Importeer de pdf dan in de Calculator.

Calculation Situation 1

- Characterization
- Emission
- Deposition nature areas
- Deposition habtitat types

Further explanation of this PDF can be found in a corresponding tassel. This reading guide and other documentation can be accessed via: www.aerius.nl.

AERIUS CALCULATOR

Contact

Legal entity	Facility Location
Ennatuurlijk B.V.	Anklaarseweg 111, 7317AS Apeldoorn

Activity

Description	AERIUS reference
Ketelhuis Apeldoorn	2Di1uFUWTF

Calculation date	Calculation year
27 August 2015, 12:47	2015

Total emission

	Situation 1	Situation 2	Difference
NOx	3,077.84 kg/y	3,097.04 kg/y	19.20 kg/y
NH3	< 1 kg/y	< 1 kg/y	-

Deposition

Hectare with highest delta project contribution (mol/ha/y)

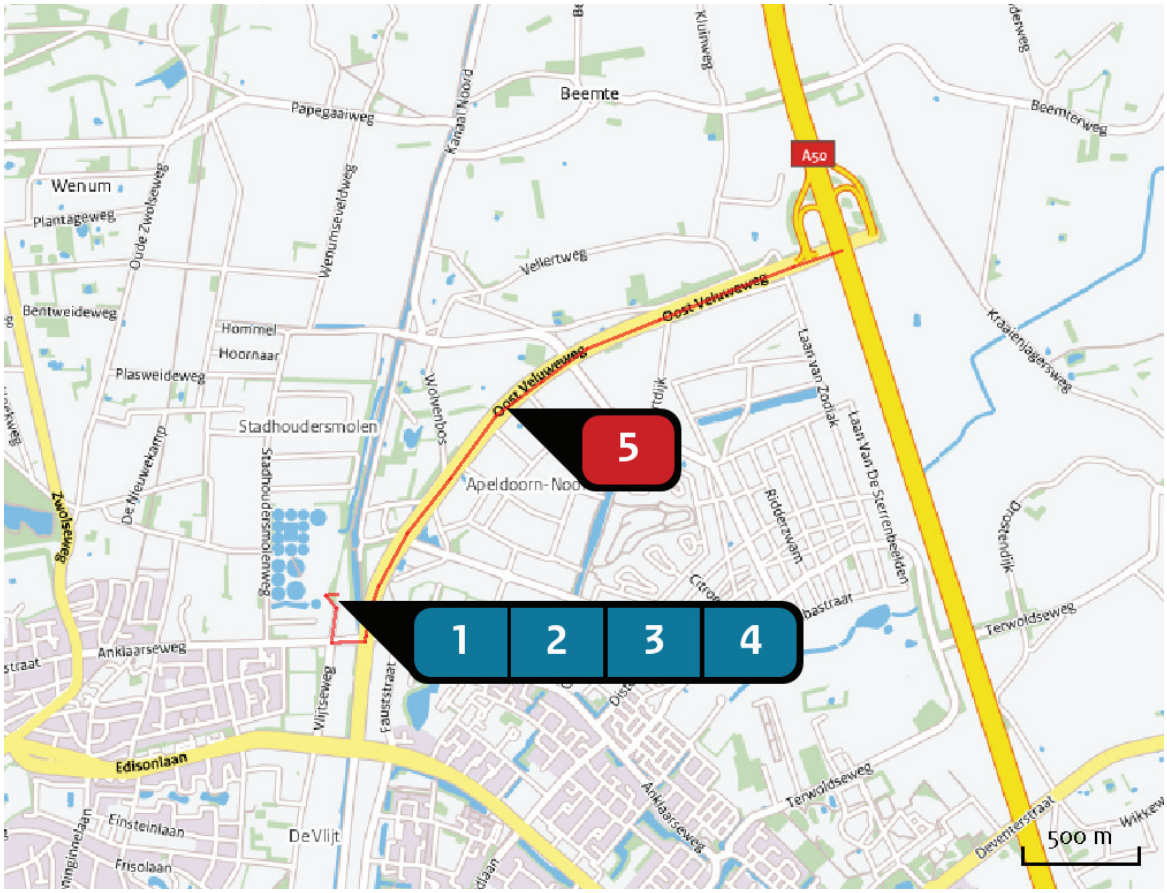
Nature area	Province
Veluwe	Gelderland

Situation 1	Situation 2	Difference
0.25	0.26	+ 0.00

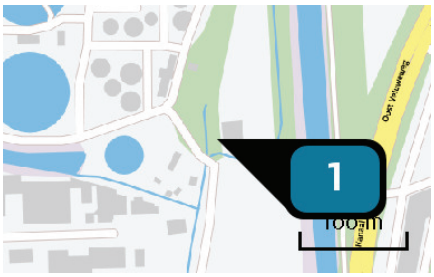
Explanation

Ketelhuis Apeldoorn feitelijk gebruik 01-10-2015 en uitbreiding houtchipsopslag

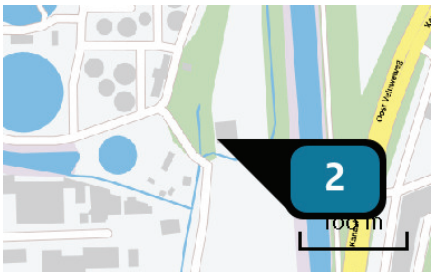
Location
Situation 1



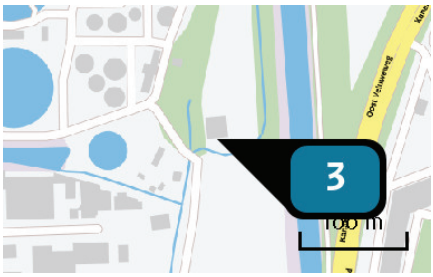
Emission (by source)
Situation 1



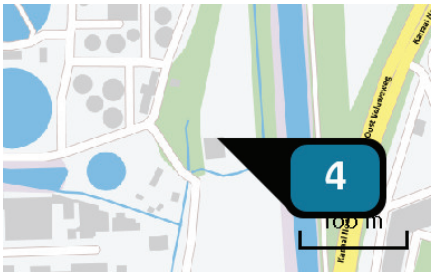
Name	gasgestookte ketel 2,9 MW
Location (X,Y)	195096, 472236
Height	7.5 m
Heat content	0.1 mw
Diurnal variation	Standard profile industry
NOx	97.50 kg/y



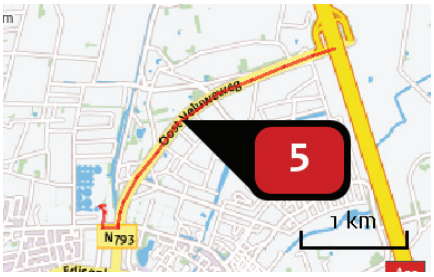
Name	gasgestookte ketel 5,3 MW
Location (X,Y)	195102, 472236
Height	7.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry
NOx	11.00 kg/y



Name	gasgestookte ketel 7,8 MW
Location (X,Y)	195111, 472232
Height	7.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry



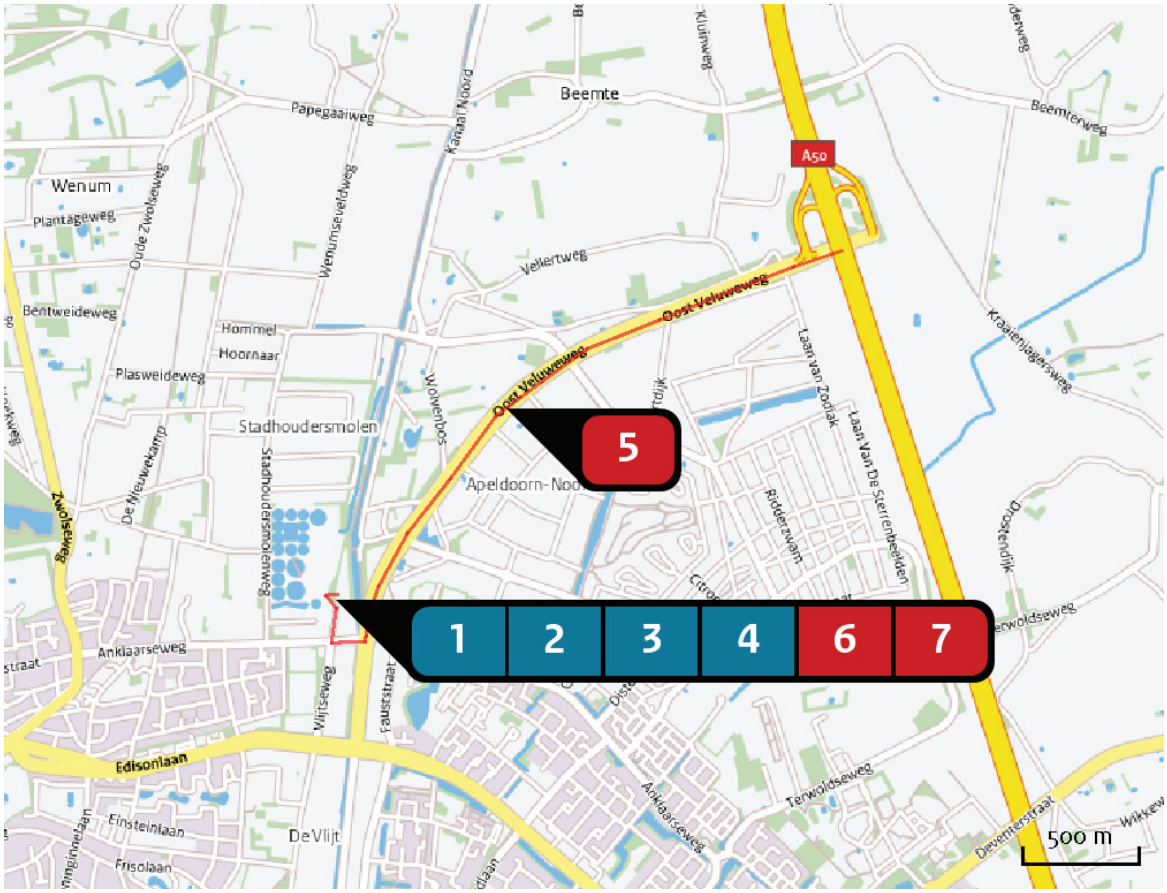
Name	houtchips ketels 2 x 1,4 MW
Location (X,Y)	195113, 472252
Height	6.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry
NOx	2,910.30 kg/y



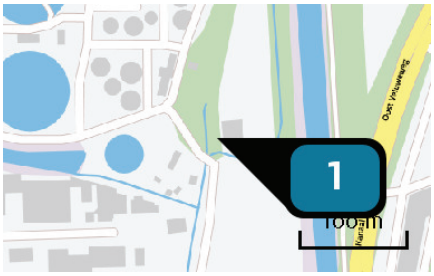
Name	wegverkeer
Location (X,Y)	195827, 473068
Height	2.5 m
Heat content	0.0 mw
NOx	59.04 kg/y
NH3	< 1 kg/y

Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	2.0	NOx	< 1 kg/y
			NH3	< 1 kg/y
Standard	Heavy Freight	8.0	NOx	58.18 kg/y
			NH3	< 1 kg/y

Location
Situation 2



Emission (by source)
Situation 2



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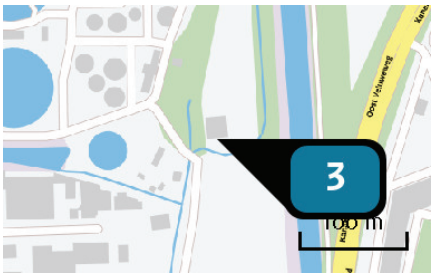
Location (X,Y)	195096, 472236
Height	7.5 m
Heat content	0.1 mw
Diurnal variation	Standard profile industry
NOx	97.50 kg/y

Name	gasgestookte ketel 5,3 MW
Location (X,Y)	195102, 472236
Height	7.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry
NOx	11.00 kg/y



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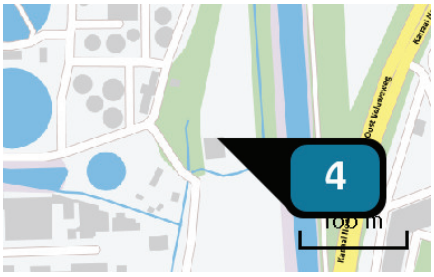
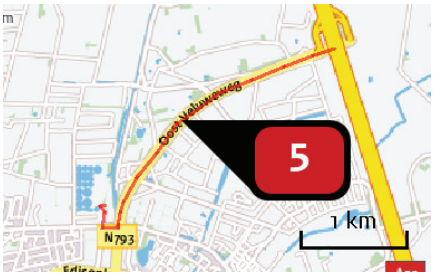
Location (X,Y)	195111, 472232
Height	7.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry



Name	houtchips ketels 2 x 1,4 MW
Location (X,Y)	195113, 472252
Height	6.5 m
Heat content	0.2 mw
Diurnal variation	Standard profile industry
NOx	2,910.30 kg/y



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Location (X,Y)	195827, 473068
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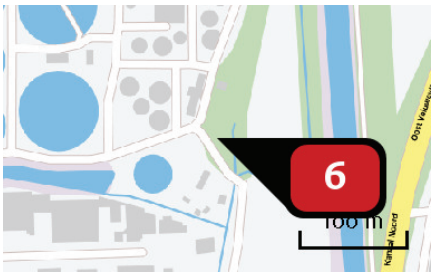


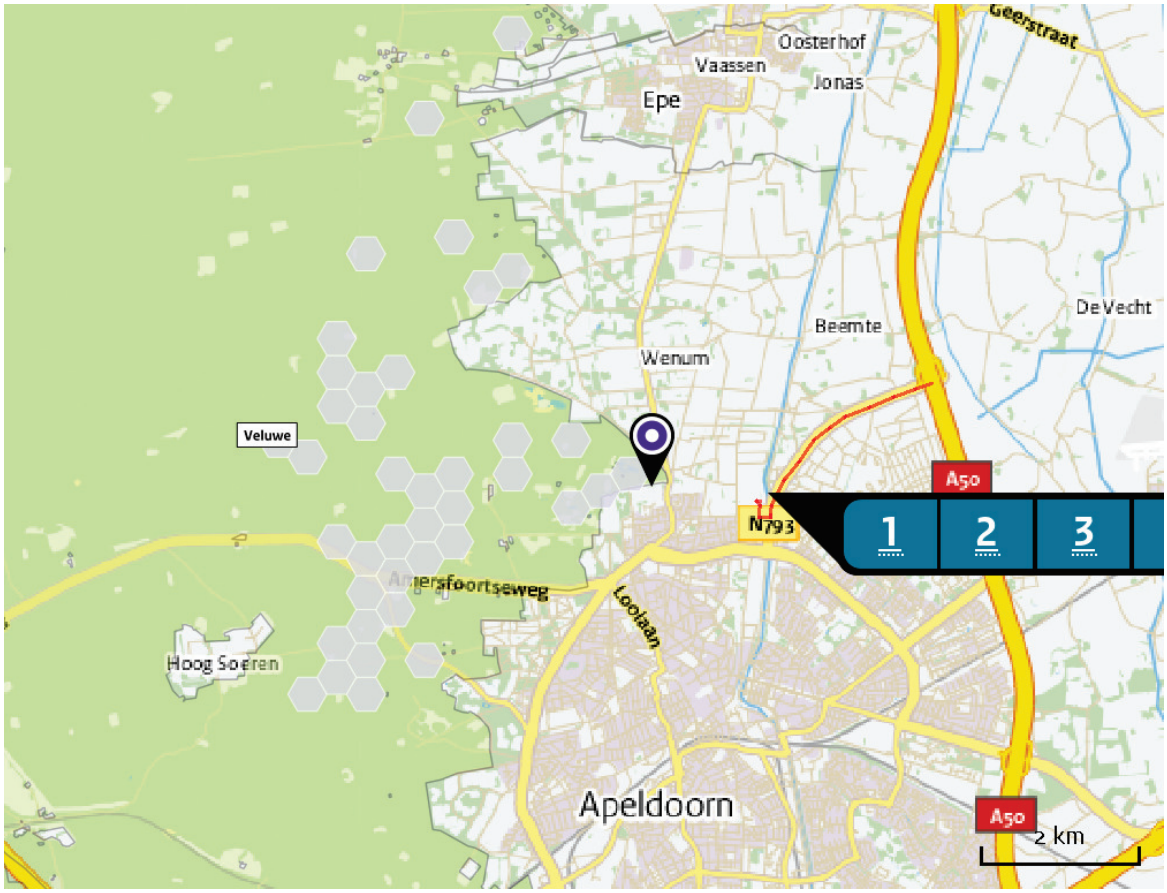
Name	Shovel 1
Location (X,Y)	195069, 472255
NOx	9.60 kg/y

Vehicle	Description	Fuel (l/y)	Emission height (m)	Spread (m)	Heat content (MW)	Substance	Emission
CST	shovel 1		3.0	1.0	0.0	NOx	9.60 kg/y

Name	Shovel 2
Location (X,Y)	195073, 472261
NOx	9.60 kg/y

Vehicle	Description	Fuel (l/y)	Emission height (m)	Spread (m)	Heat content (MW)	Substance	Emission
CST	shovel 2		3.0	1.0	0.0	NOx	9.60 kg/y

Deposition



Highest delta projectcontribution (Veluwe)

Highest delta projectcontribution per nature area

- Habitat directive
- Bird directive
- Natural monument
- Habitat directive, Bird directive
- Habitat directive, Natural monument
- Bird directive, Natural monument
- Habitat directive, Bird directive, Natural monument

Deposition PAS areas

Area	Hectare with highest difference (mol/ha/y) Situation 1	Situation 2	Difference	Highest deposition Situation 2 (mol/ha/y)	Exceedance critical load	Development space available
Veluwe	0.25	0.26	+ 0.00	0.26	●	✓

○ No exceedance

● Exceedance

✓ Development space available*

✗ No development space available

Over 60% of the development space has been assigned for at least one hectare.

* When assessing a permit application under the Nature Conservation Act it will be determined whether there is sufficient development space available and that significant deterioration can be excluded.

Deposition per habitat

Veluwe

Habitattype	Hectare with highest difference (mol/ha/y)			Exceedance critical load	Development space available
	Situation 1	Situation 2	Difference		
H9120 Beuken-eikenbossen met hulst	0.25	0.26	+ 0.00	●	⬢
H4030 Droge heiden	0.17	0.17	+ 0.00	●	⬢
H9190 Oude eikenbossen	0.09	0.09	+ 0.00	●	⬢
H2330 Zandverstuivingen	>0.05	>0.05	+ 0.00	●	⬢

○ No exceedance

● Exceedance

⬢ Development space available*

⊗ No development space available

Over 60% of the development space has been assigned for at least one hectare.

* When assessing a permit application under the Nature Conservation Act it will be determined whether there is sufficient development space available and that significant deterioration can be excluded.

Disclaimer

References for calculations

This calculation is based on:

AERIUS	version 2014.1_20150825_fb538daf31
Database	version 2014.1_20150825_fb538daf31

More information about the used data on www.aerius.nl/methodiek