



DIGITAL TRANSFORMATION FOR RESPONSIBLE LAND ADMINISTRATION

FIG Commission 7 & 2 Annual Meeting 2023

2-4 October 2023, Deventer



Registration of Solar Parks in the Netherlands

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Content:

- Registration in Key Register Topography
- Distribution of solar parks in the Netherlands
- Characteristics of locations
- Benefits for public policy and public debate

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Task Dutch Land Registry

- Maintaining the topographical map of the Netherlands is part of the legal tasks of the Dutch Land Registry
- The map consists of several map layers, including roads, water, buildings and terrain surfaces. But also contains so-called functional areas



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Registration of Solar Parks

- Included as functional areas in the Top10NL(Key register Topography) since 2020
- All solar parks larger than 1,000 m² that are visible (under construction) from the aerial photo are registered



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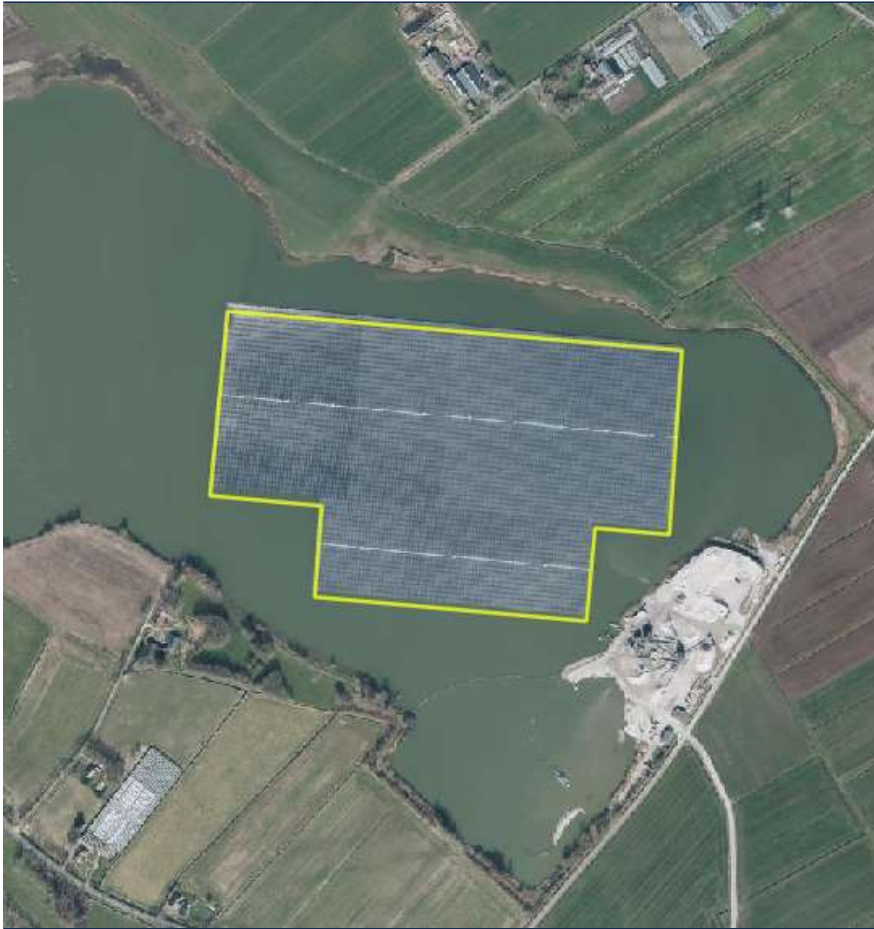


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Registration of Solar Parks

- Only solar parks on land and water are registered. Not on objects, such as buildings and parking lots
- All solar parks larger than 1,000 m² that are visible (under construction) from the aerial photo are registered
- Updated annually
- We use 'triggers' to find solar parks (Open Street Maps, image recognition). The topographers then do the drawing themselves

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Result:

- 562 solar parks with a total area of 3,621 hectares. The smallest park is 1,000 m². The largest is over 1 million m²
- Provides insight into installed surface area, not into power or capacity
- By combining this spatial data with other spatial datasets, more insight is gained into which land is used and which locations are being developed

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From data to practice

- Where are solar parks located?
- Multi-functional land use
- Previous land-use
- Benefits for public policy and public debate

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Where are the located?

- NL population density is high
- Quantity & surface of solar parks
- Multi-functional areas



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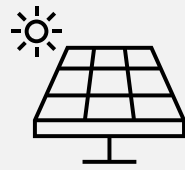


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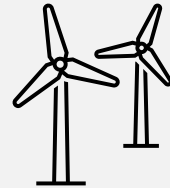




Multi-functional areas



Solar parks



Windfarms

	Total Solar Parks	Windfarms*
Quantity	562	44
% of total	100%	8%
Surface (ha)	3.621	462
% of total surface	100%	13%

* within 100 meters
 ** completely within

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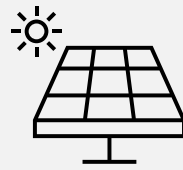


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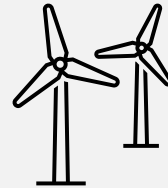




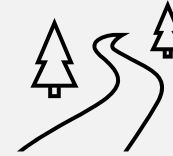
Multi-functional areas



Solar parks



Windfarms



Infrastructure

	Total Solar Parks	Windfarms*	Infrastructure*
Quantity	562	44	247
% of total	100%	8%	44%
Surface (ha)	3.621	462	-
% of total surface	100%	13%	-

* within 100 meters
 ** completely within

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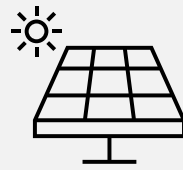


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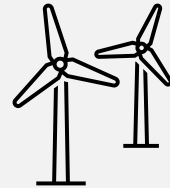




Multi-functional areas



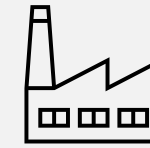
Solar parks



Windfarms



Infrastructure



Industries

	Total Solar Parks	Windfarms*	Infrastructure*	Industrial sites*
Quantity	562	44	247	203
% of total	100%	8%	44%	36%
Surface (ha)	3.621	462	-	1.376
% of total surface	100%	13%	-	38%

* within 100 meters
 ** completely within

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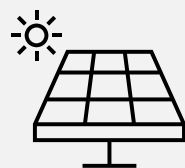


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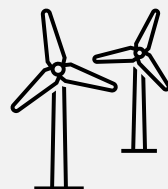




Multi-functional areas



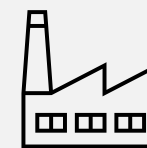
Solar parks



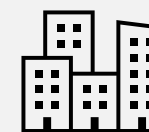
Windfarms



Infrastructure



Industries



Urban environment

	Total Solar Parks	Windfarms*	Infrastructure*	Industrial sites*	Urban Environments **
Quantity	562	44	247	203	107
% of total	100%	8%	44%	36%	19%
Surface (ha)	3.621	462	-	1.376	132
% of total surface	100%	13%	-	38%	4%

* within 100 meters

** completely within

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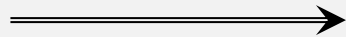
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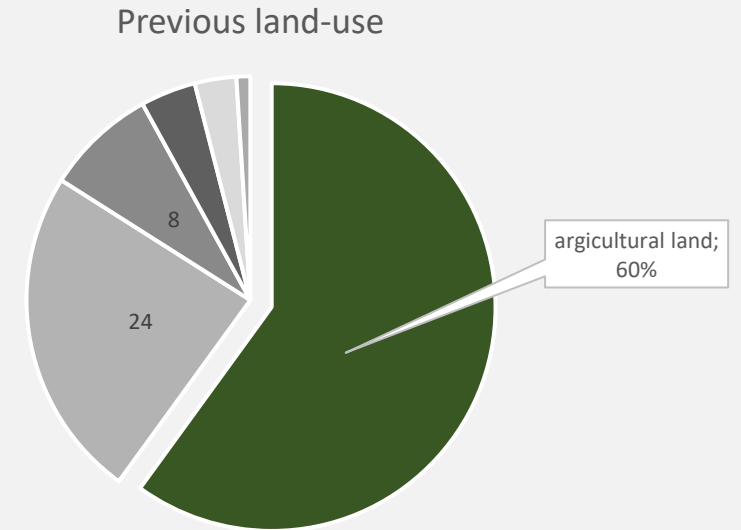


Previous land-use: Agricultural land


 Agricultural land
 (2,176 ha)




 Solar parks
 (3,621 ha)



However, that is only 0,12% of the total agricultural land in the Netherland.

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Benefits for public policy and public debate

- (inter)national climate agreements
- provides opportunities for policy monitoring
- encourage public debate

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Questions



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