Derived Datasets

The derived datasets are datasets necessary as inputs in our data preparation in SPSS Statistics. They are made manually based on external data sources or are .csv files exported from operations in ArcGISPro.

Dataset	Derived from	Variables used
Grid_return_capacity.csv	Made manually: based on Capaciteitskaart elektriciteitsnet for ZLF Zwolle Frankhuisweg voedingsgebied	MV_capacity: Transport capacity of medium voltage grid MV-demand: Transport demand for medium voltage grid HV_capacity: Transport capacity of high voltage grid HV-demand: Transport demand for high voltage grid
stadshagen_allfunctions_lvl1.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'woonfunctie' OR 'industriefunctie' OR 'bijeenkomstfunctie' OR 'gezondheidszorgfunctie' OR 'bijeenkomstfunctie, kantoorfunctie' OR	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.

	'onderwijsfunctie' OR 'winkelfunctie' OR 'bijeenkomstfunctie, logiesfunctie' OR 'sportfunctie' OR 'celfunctie' OR 'bijeenkomstfunctie' OR 'overige gebruiksfunctie' Filter by potentia_2: potentia_2 is equal to1	
stadshagen_allfunctions_lvl2.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'woonfunctie' OR 'industriefunctie' OR 'bijeenkomstfunctie' OR 'gezondheidszorgfunctie' OR 'bijeenkomstfunctie, kantoorfunctie' OR 'onderwijsfunctie' OR 'winkelfunctie' OR 'bijeenkomstfunctie, logiesfunctie' OR 'sportfunctie' OR 'celfunctie' OR 'bijeenkomstfunctie' OR 'overige gebruiksfunctie' Filter by potentia_2: potentia_2 is equal to2	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.
stadshagen_housing_lvl1.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen"	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of

	Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'woonfunctie' Filter by potentia_2: potentia_2 is equal to1	the roof area in Stadshagen fulfilling the filter.
stadshagen_housing_lvl2.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'woonfunctie' Filter by potentia_2: potentia_2 is equal to2	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.
stadshagen_industry_lvl2.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'industriefunctie' Filter by potentia_2: potentia_2 is equal to2	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.
stadshagen_largeroofs_lvl2.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen"	. Total_area: Total area of each building fulfilling the specific filter conditions will be summed to

	Filter by pv_class: pv_class is equal to0 Filter by total_area: total_area >= 2000 Filter by potentia_2: potentia_2 is equal to2	get a sum of the roof area in Stadshagen fulfilling the filter.
stadshagen_otherfunctions_lvl1.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'bijeenkomstfunctie' or 'gezondheidszorgfunctie' or 'bijeenkomstfunctie, kantoorfunctie' or 'onderwijsfunctie' or 'winkelfunctie' or 'bijeenkomstfunctie, logiesfunctie' or 'sportfunctie' or 'celfunctie' or 'bijeenkomstfunctie' or 'overige gebruiksfunctie' Filter by potentia_2: potentia_2 is equal to1	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.
stadshagen_otherfunctions_lvl2.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to0 Filter by gebruiksdo: Value includes the text 'bijeenkomstfunctie' or	Total_area: Total area of each building fulfilling the specific filter conditions will be summed to get a sum of the roof area in Stadshagen fulfilling the filter.

	'gezondheidszorgfunctie' or 'bijeenkomstfunctie, kantoorfunctie' or 'onderwijsfunctie' or 'winkelfunctie' or 'bijeenkomstfunctie, logiesfunctie' or 'sportfunctie' or 'celfunctie' or 'bijeenkomstfunctie' or 'overige gebruiksfunctie' Filter by potentia_2: potentia_2 is equal to2	
stadshagen_yespanels.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by pv_class: pv_class is equal to1	Potentia_2: Used to determine the suitability level of current roofs with solar panels in order to calculate current energy generated
Dailydata_lvl1.csv	Derived from PVGIS- Daily data pane Location: 52.508 N, 6.094 E (Zwolle) Radiation Database: PVGIS-SARAH3 Month: June On fixe plane: Clear-sky Irradiance Slope: 45 Azimuth: 180	V1 (Time(UTC)): time of day V3 :Irradiance at time of day in W/m^2
Dailydata_lvl2.csv	Derived from PVGIS- Daily data pane Location: 52.508 N, 6.094 E (Zwolle) Radiation Database: PVGIS-SARAH3 Month: June On fixe plane: Clear-sky Irradiance Slope: 35 Azimuth: 90	V1 (Time(UTC)): time of day V3 :Irradiance at time of day in W/m^2
Dailydata_lvl3.csv	Derived from PVGIS- Daily data pane Location: 52.508 N, 6.094 E (Zwolle)	V1 (Time(UTC)): time of day

	Radiation Database: PVGIS-SARAH3 Month: June On fixe plane: Clear-sky Irradiance Slope: 30 Azimuth: 0	V3 :Irradiance at time of day in W/m^2
kWh_allfunctions_lvl1.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 313.60 Slope: 45 Azimuth: 180	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_allfunctions_lvl2.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 30977.10 Slope: 35 Azimuth: 90	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_housing_lvl1.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 307.30 Slope: 45 Azimuth: 180	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_housing_lvl2.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 26946.15 Slope: 35 Azimuth: 90	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_industry_lvl2.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 1130.15 Slope: 35 Azimuth: 90	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_largeroofs_lvl2.csv	Derived from PVGIS- Grid connected pane	V1 (Month): Month of simulation

	Key changable Paramaters compared to table y added/Building integrated Installed peak PV power [kWp]: 2623.60 Slope: 35 Azimuth: 90	V5 (E_m): kWh generated in month in simulation
kWh_otherfunctions_lvl1.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: 6.30 Slope: 45 Azimuth: 180	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
kWh_otherfunctions_lvl2.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y Installed peak PV power [kWp]: Slope: 35 Azimuth: 90	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
Stadshagen_huidige_opwek.csv	Derived from PVGIS- Grid connected pane Key changable Paramaters compared to table y : Installed peak PV power [kWp]: 3654.70 Slope: 30 Azimuth: 0	V1 (Month): Month of simulation V5 (E_m): kWh generated in month in simulation
woningen_pc6.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen" Filter by gebruiksdo is equal to“woonfunctie”	*Number of cases*
bedrijven_pc6.csv	Derived from solar_roof_potential_Zwolle.shp Following filters were applied: Filter by neighborhood: neighborho is equal to"Wijk 22 Stadshagen"	

	Filter by gebruiksdo is not equal to“woonfunctie”, gebruiksdo is not equal to“”	