

2023 (June) South African Renewable Energy Grid Survey



Results Summary

Contracted (MWac)

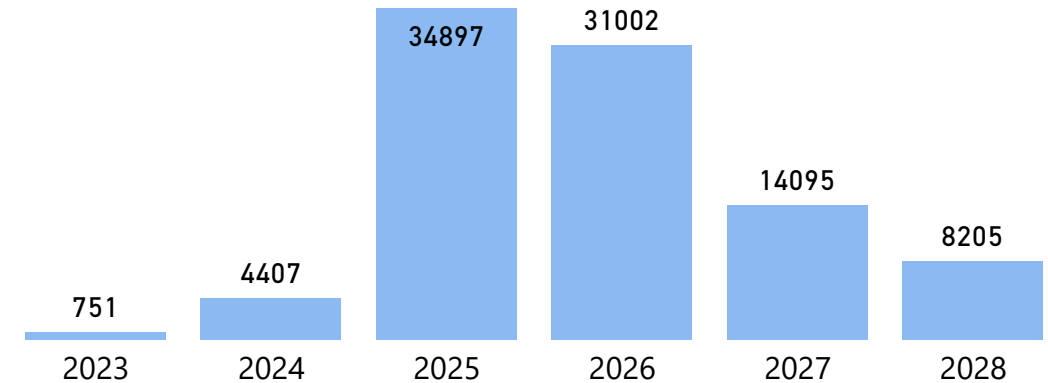
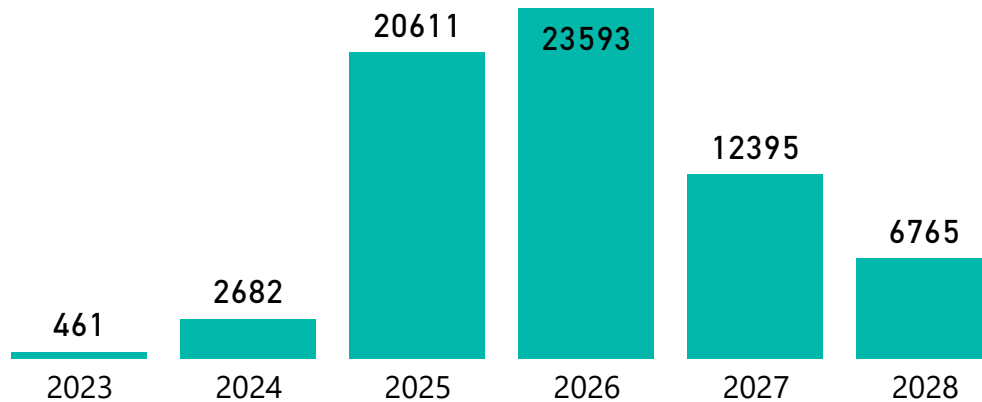
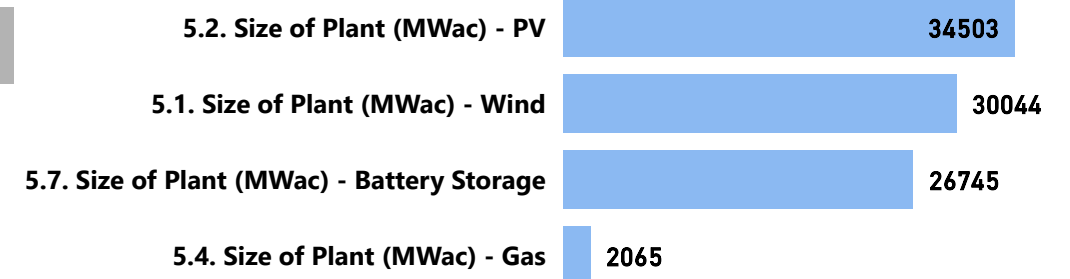
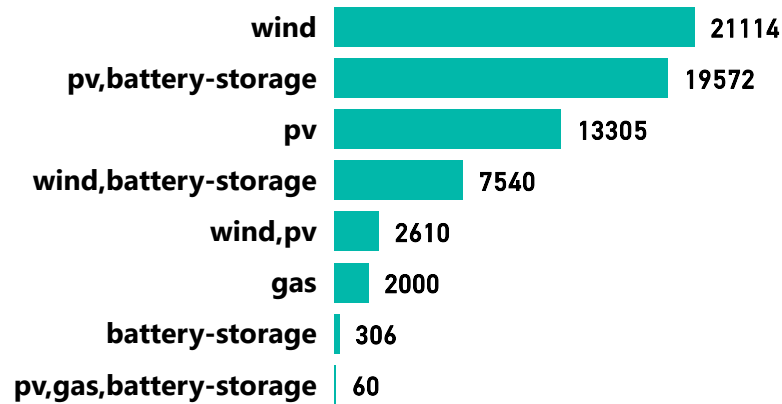
66507

Contributions

209

Installed (MWac)

93357



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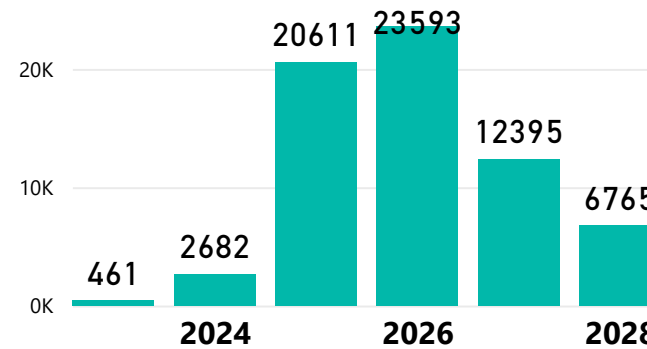
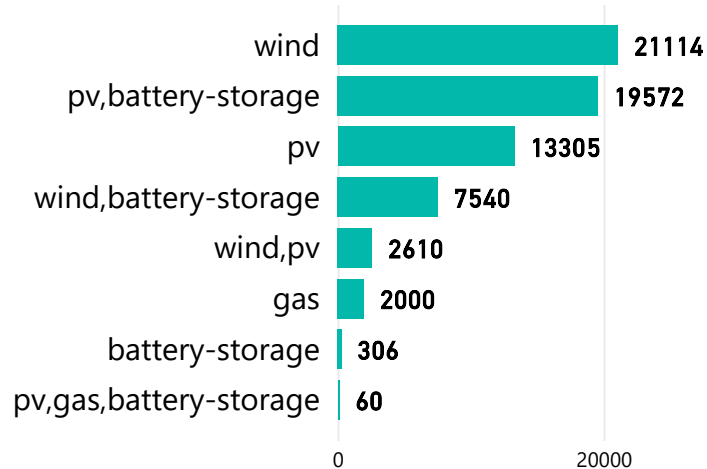
Contracted vs Installed

Contracted (MWac)

66507

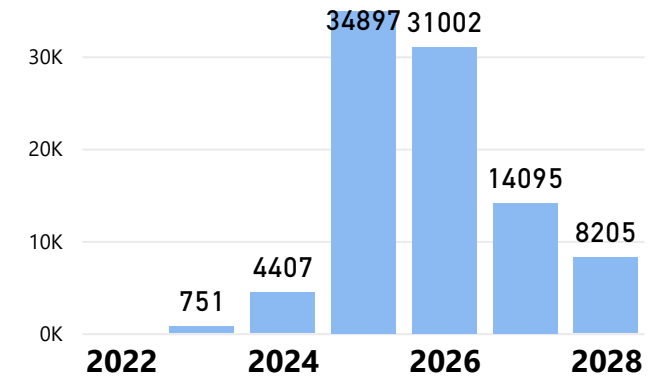
Installed (MWac)

93357

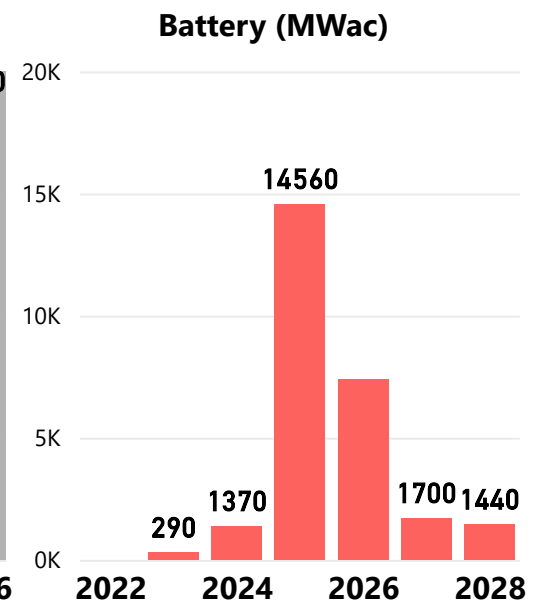
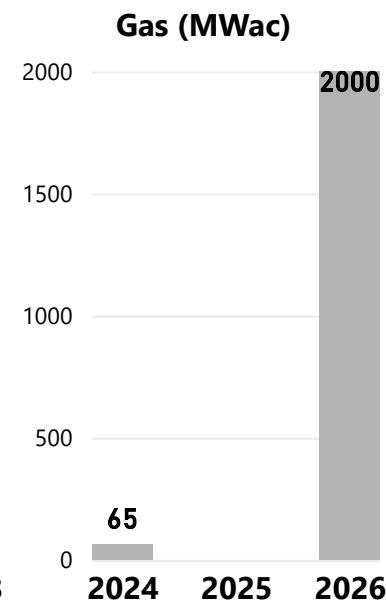
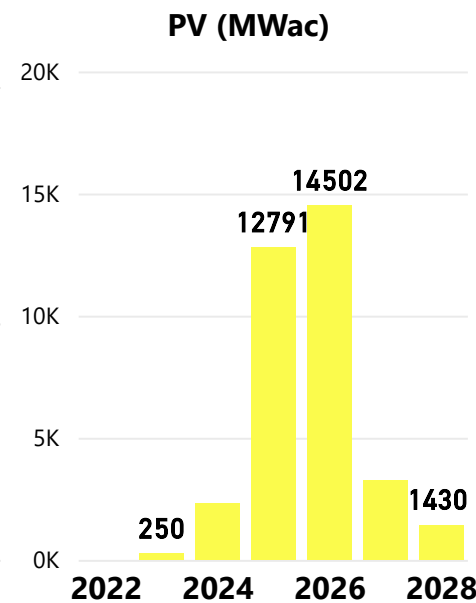
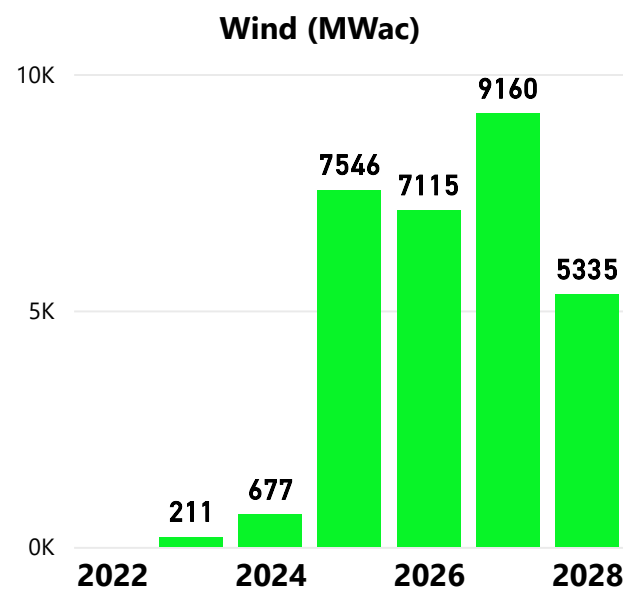


Contributions

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Technology



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Type

A: Project is at an Advanced Development Level.

Environmental Approval/ Record of Decision (ROD) has been granted (contributor willing to provide application reference number). The site measurement campaign and feasibility work has been completed. PPA signed or close to signature/or project would be ready to bid into the nearest REIPPP round. Projects in this category would be able to reach COD within 3 years if granted a grid connection by Eskom or the Municipality immediately. For Embedded generation projects, the project will be ready to be connected to the embedded network within 3 years.

Type

B: Project is Under Development.

Draft EIR (Environmental Impact Report) submitted or Basic Assessment report submitted (willing to provide EIA application reference number). Bird and bat monitoring already progressed (Wind only). Feasibility studies and layout are advanced or completed. Project off-taker or intended off-taker not yet finalized but in progress. Measurement campaign completed (or near completion) for 12 months. Projects in this category would be able to reach COD within 5 years if granted a grid connection by Eskom Immediately.

Type

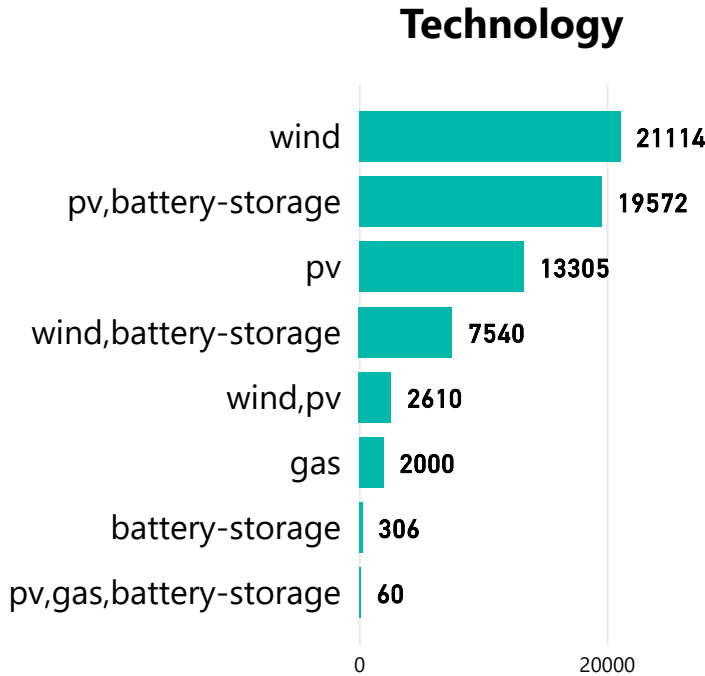
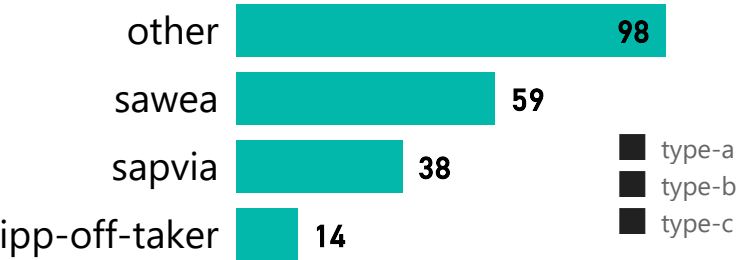
C: Project is in Early stage of Development.

Projects in this category are still in feasibility/prefeasibility stage. Bird and bat monitoring about to begin (Wind only). Measurement campaign in progress. Developer has however identified an off-taker in the area or has interest in developing a Solar or Wind project in the area without an off-taker. Developer sees potential for future development in this area and intends commissioning feasibility studies and EIAs. Projects could reach COD within 5-7 years.

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Results
Contracted (MWac)



Contracted (MWac)



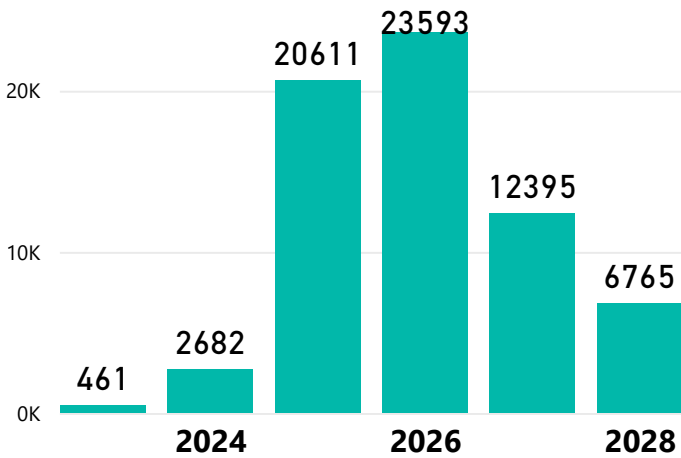
Installed (MWac)



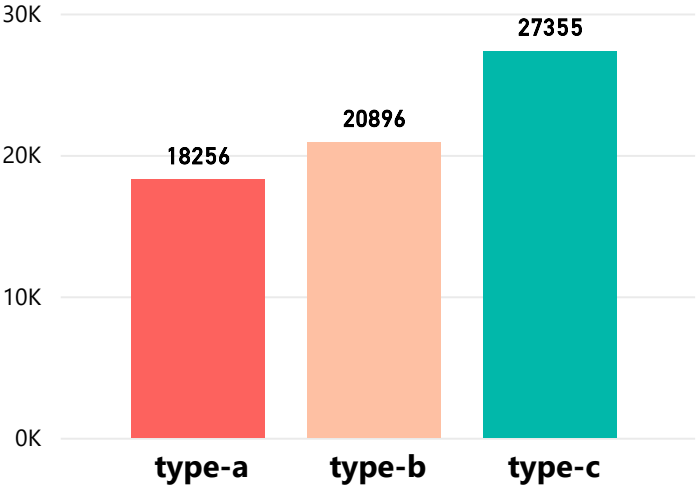
Number of contributions



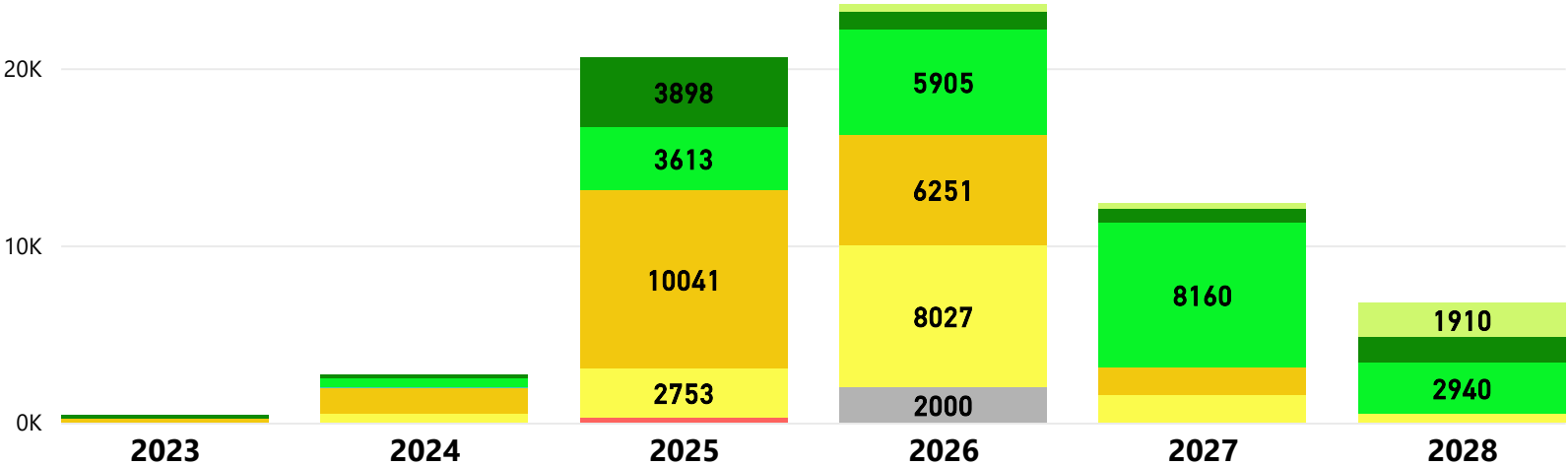
Contracted (MWac) Annual build



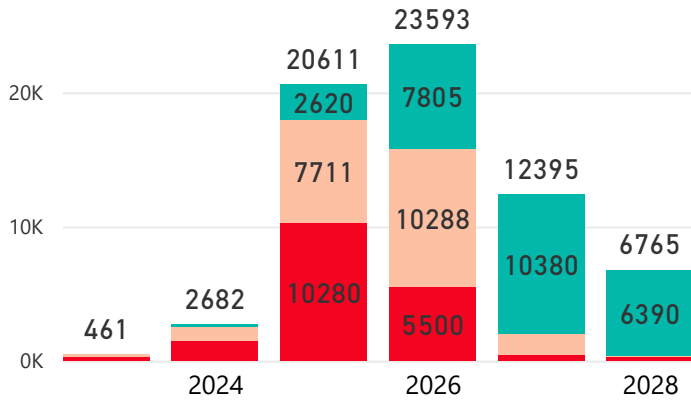
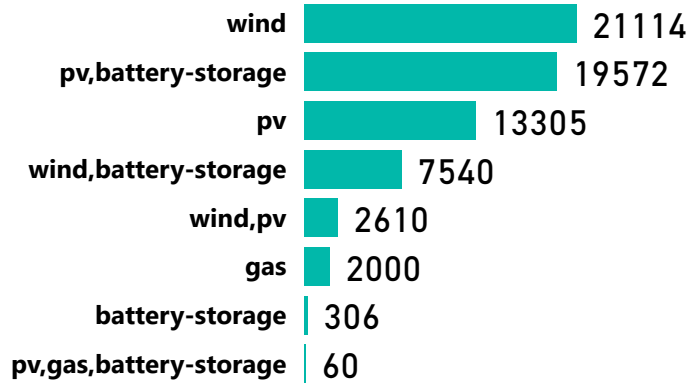
Project Status



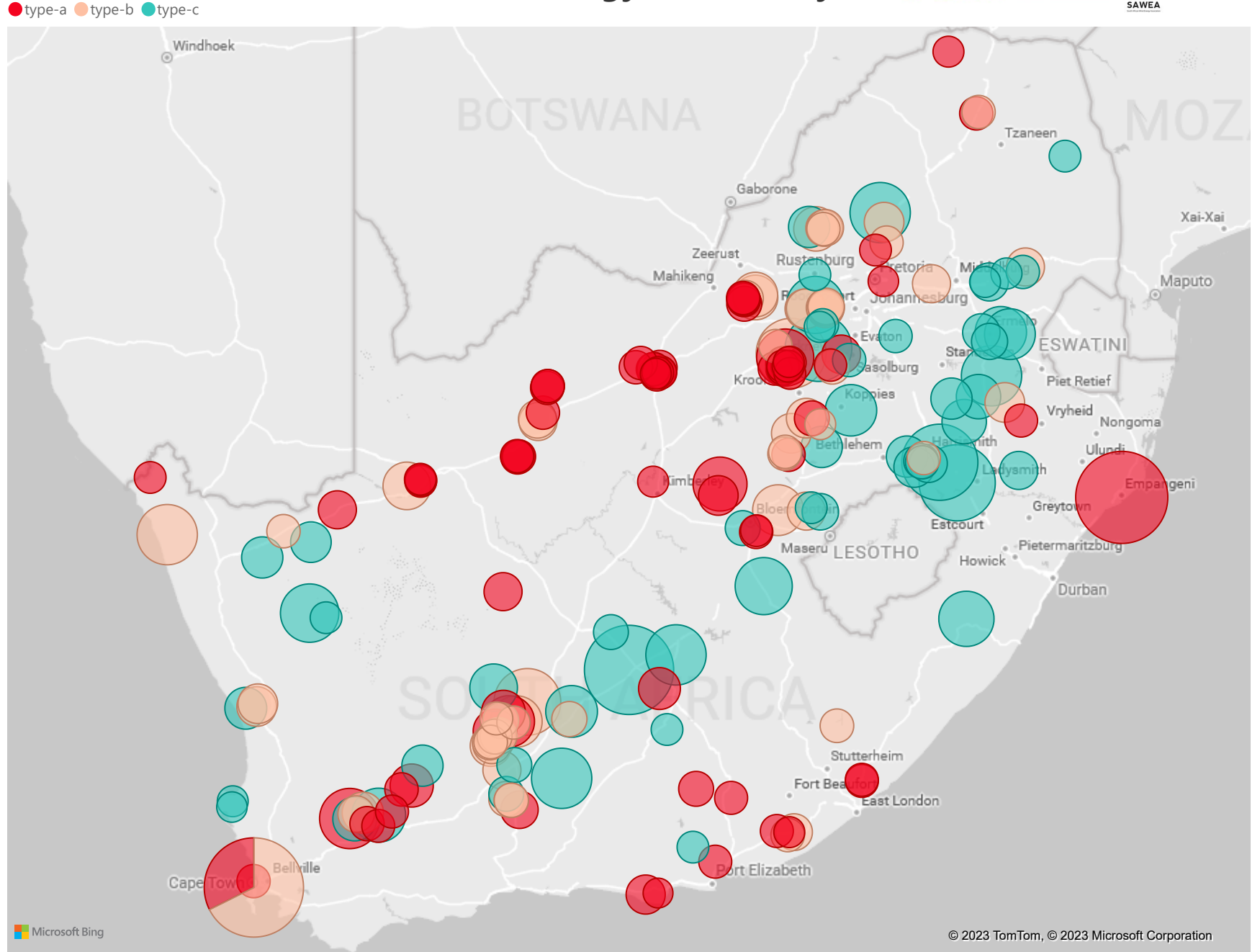
● battery-storage ● gas ● pv ● pv,battery-storage ● pv,gas,battery-storage ● wind ● wind,battery-storage ● wind,pv



Project Type / Status

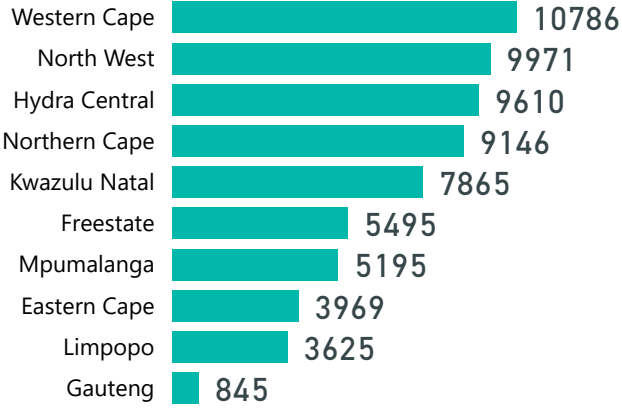
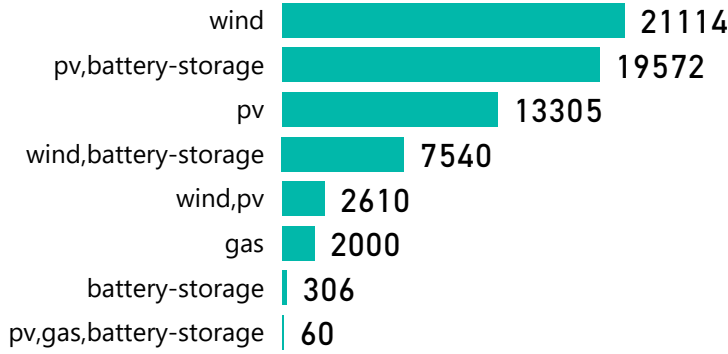
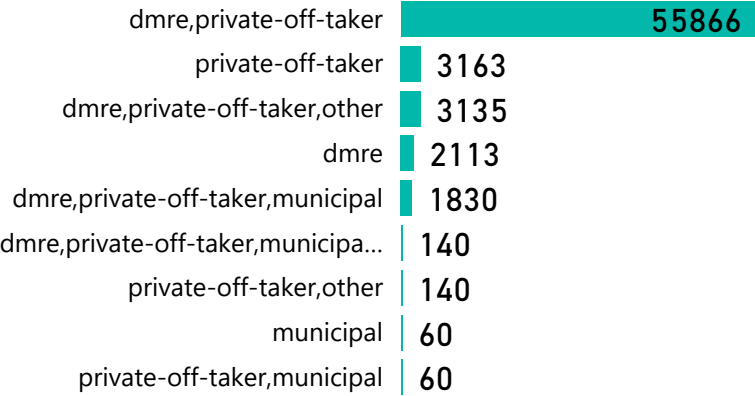


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DMRE vs Private (MWac)

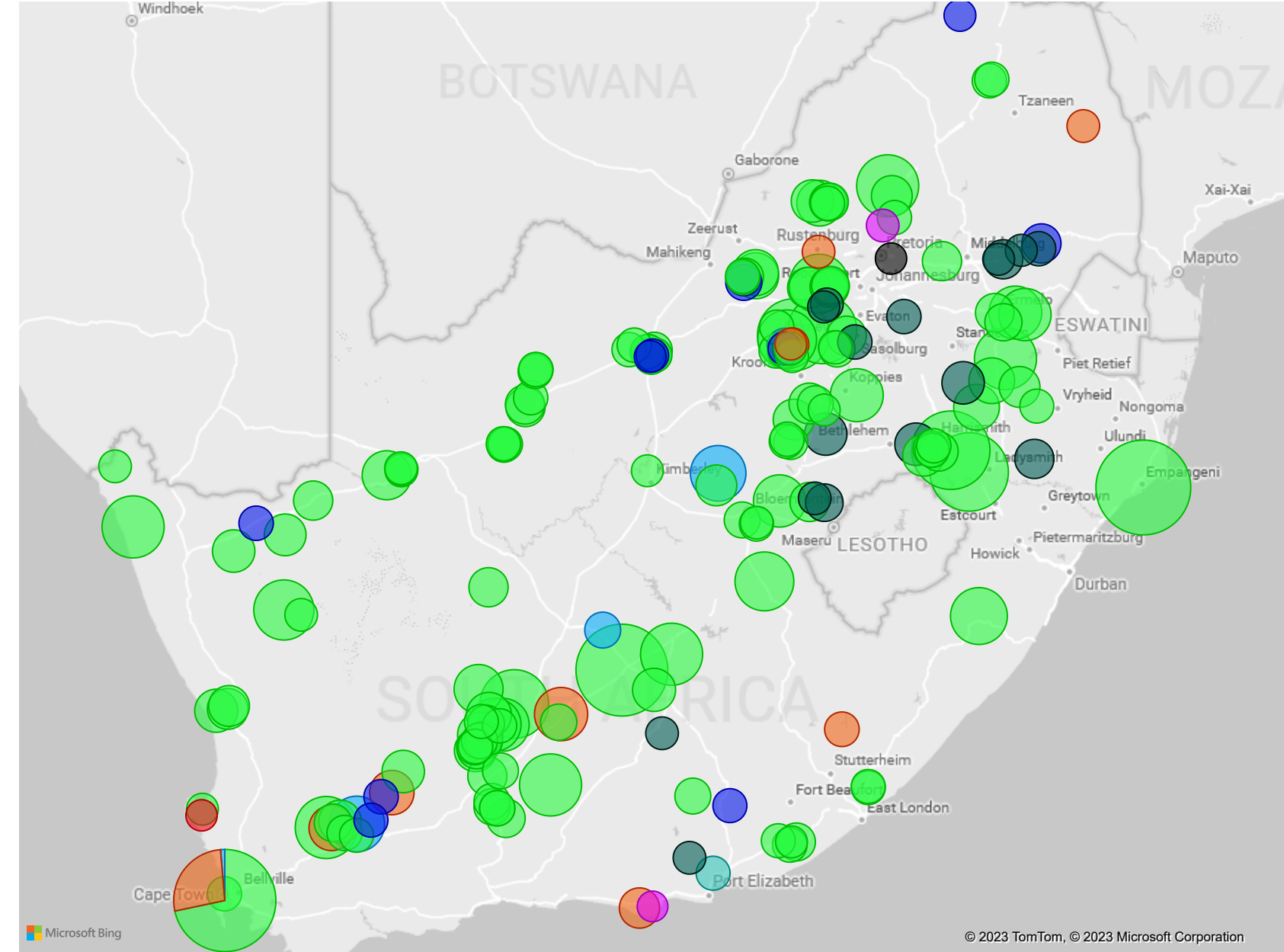
- type-a
- type-b
- type-c



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- dmre
- dmre,private-of...
- dmre,private-...
- dmre,private-...
- dmre,private...
- municipal
- private-off-t...
- private-off...
- private-off...



 Eskom SAPVIA
South African Photovoltaic Industry Association SAWEA
South African Wind Energy Association

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Legend: type-a, type-b, type-c, current-application, eia-approved, future-application

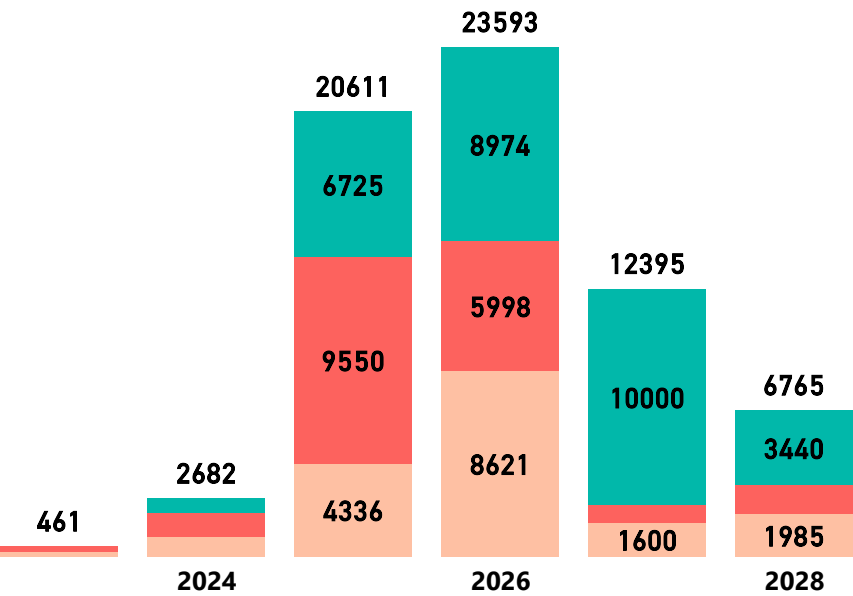
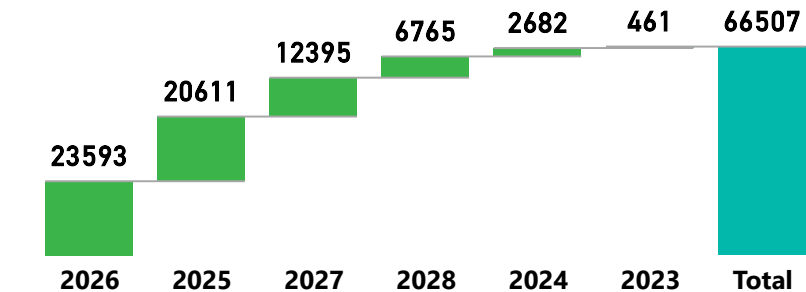
Legend: battery-storage, gas, pv, pv,battery-storage, pv,gas,battery-storage, wind, wind,battery-storage, wind,pv

Province	Wind	PV	Wind, Battery-Storage	PV, Battery-Storage	Wind, PV	Total (MW)
Eastern Cape	3536	0	0	0	0	3969
Freestate	750	2275	720	1750	0	5495
Gauteng	0	845	0	0	0	845
Hydra Central	3430	820	2380	1070	1910	9610
Kwazulu Natal	4765	0	0	0	0	7865
Limpopo	0	1575	0	2050	0	3625
Mpumalanga	3720	0	720	0	0	5195
North West	0	5150	0	4821	0	9971
Northern Cape	2040	650	0	5750	0	9146
Western Cape	2873	1455	3387	3011	0	10786

Legend: battery-storage, gas, pv, pv,battery-storage, pv,gas,battery-storage, wind, wind,battery-storage, wind,pv

Province	Wind	PV	Wind, Battery-Storage	PV, Battery-Storage	Wind, PV	Total (%)
Eastern Cape	14	0	0	0	0	16
Freestate	7	8	7	7	0	19
Gauteng	0	6	0	0	0	6
Hydra Central	5	5	6	5	0	17
Kwazulu Natal	7	0	0	0	0	13
Limpopo	0	9	0	0	0	13
Mpumalanga	9	0	0	0	0	14
North West	0	13	0	20	0	33
Northern Cape	5	5	0	26	0	38
Western Cape	12	11	12	11	0	40

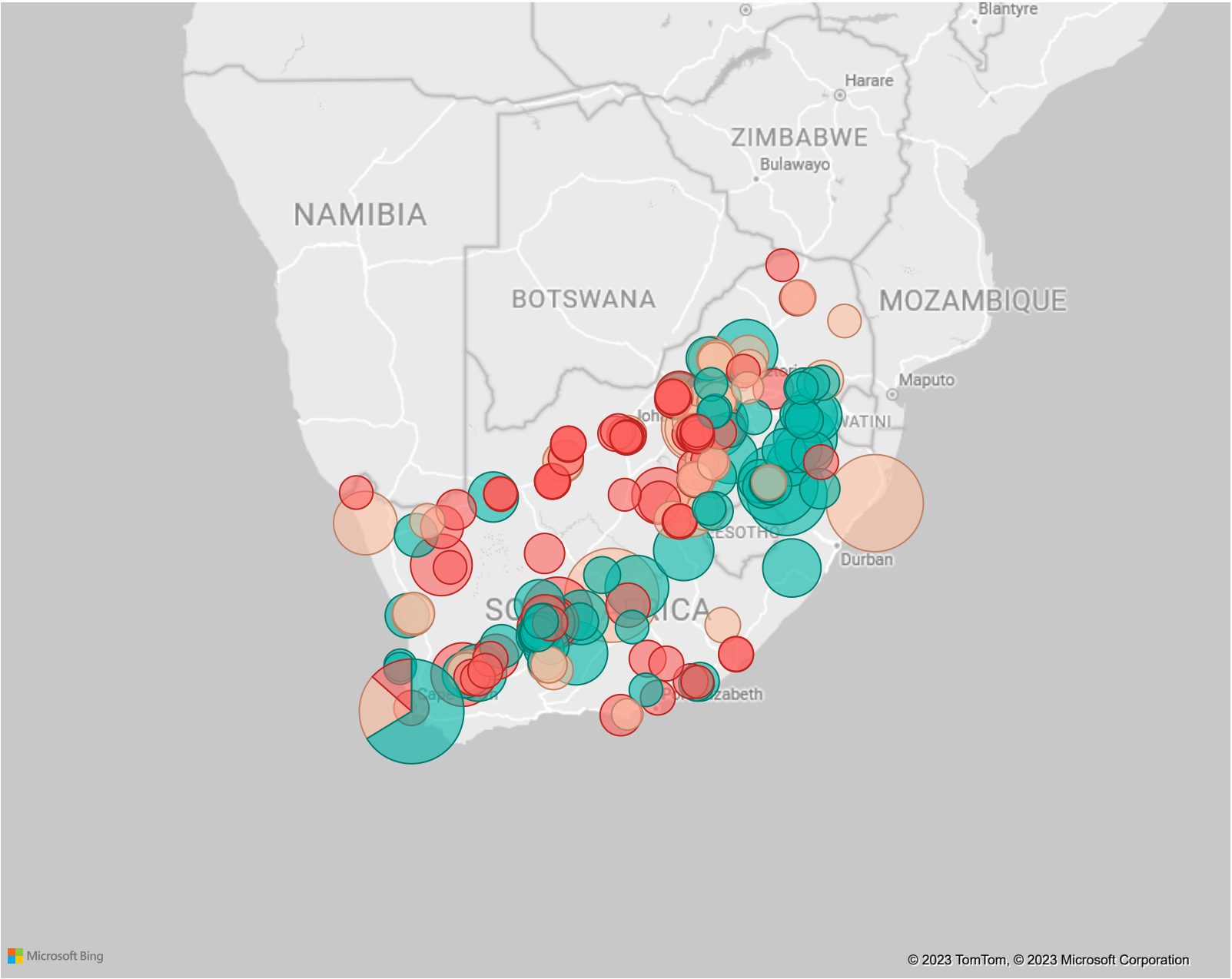
EIA Ready (MWac)



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current-application eia-approved future-application

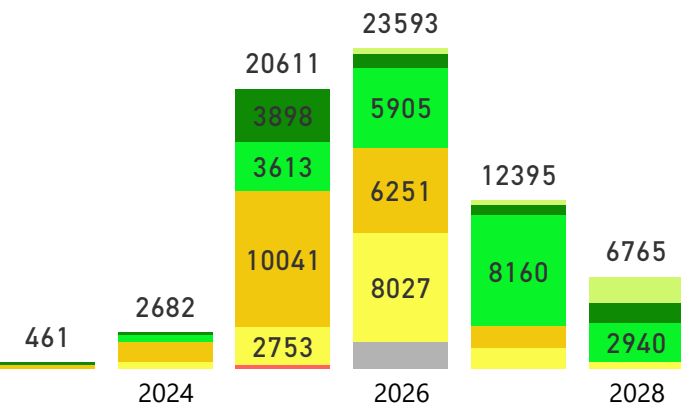
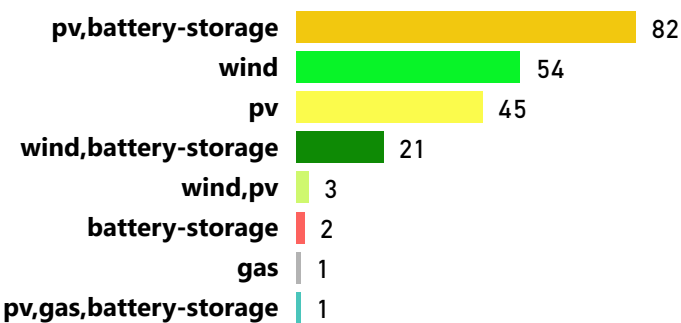
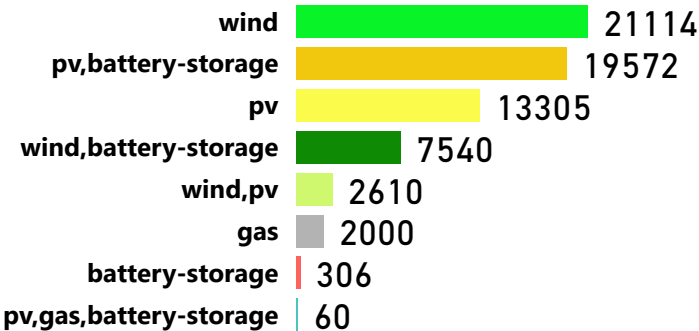


Technology (MWac)

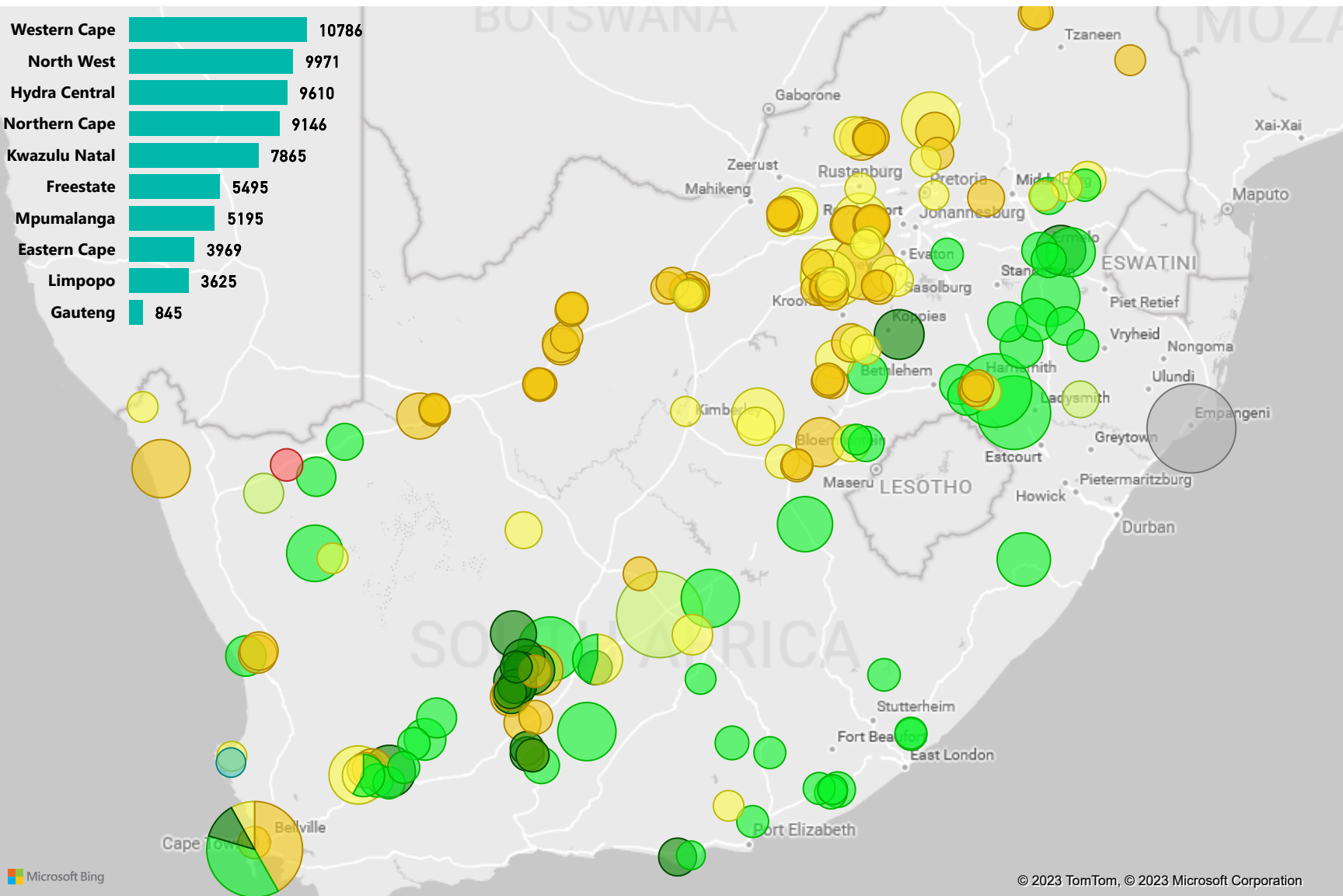
2023 South African Renewable Energy Grid Survey



- ☐ type-a
- ☐ type-b
- ☐ type-c
- ☐ current-application
- ☐ eia-approved
- ☐ future-application

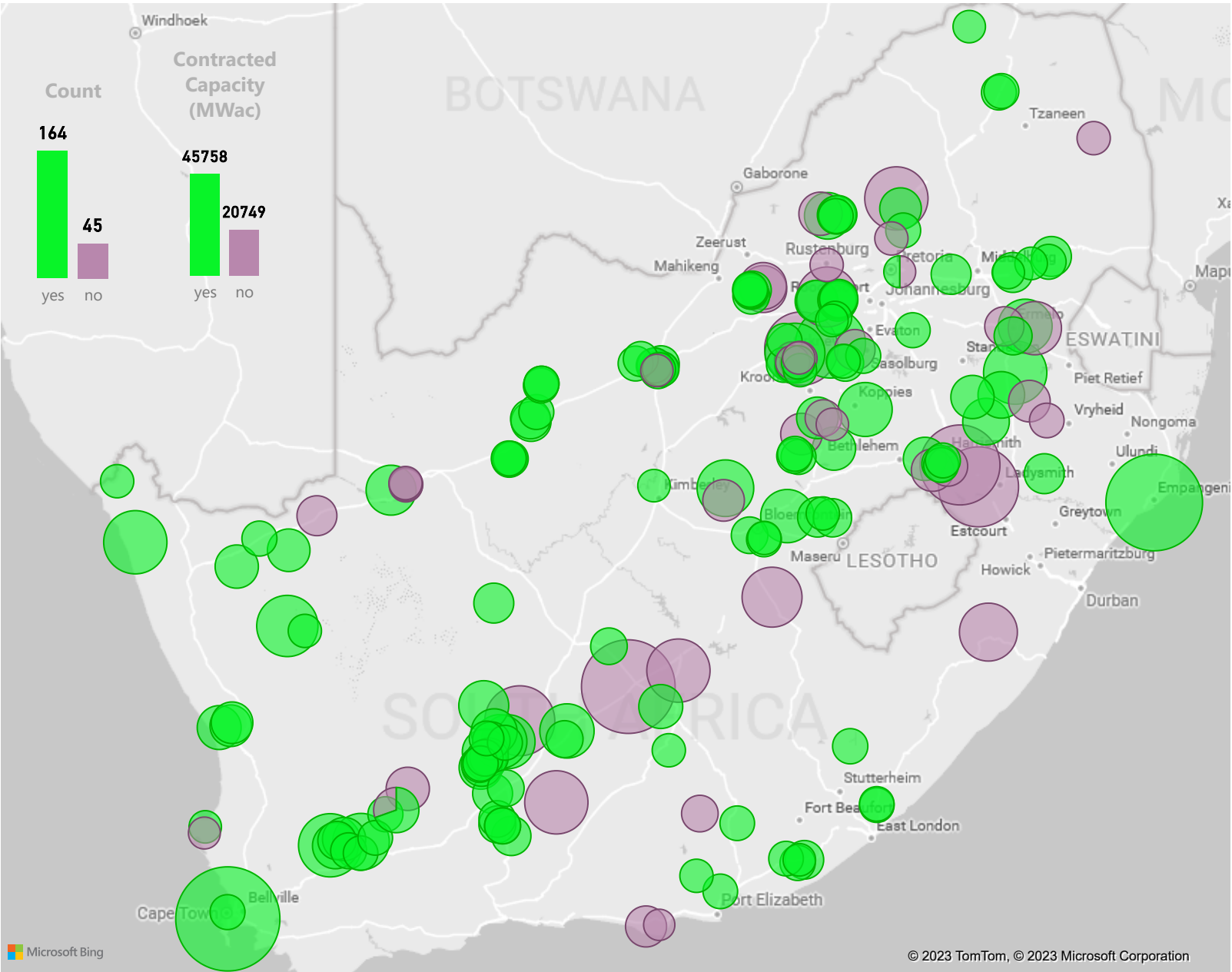
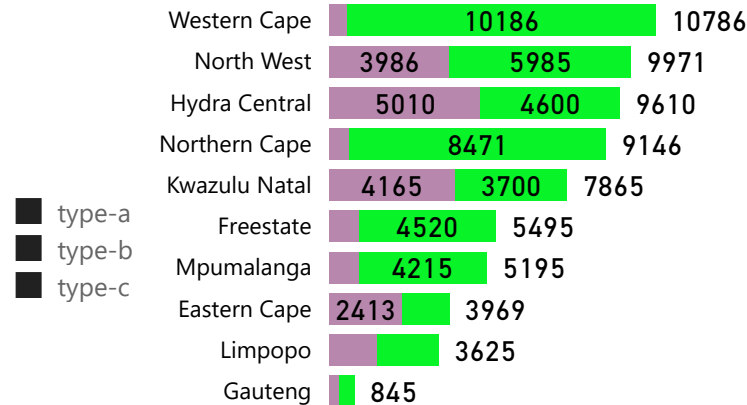
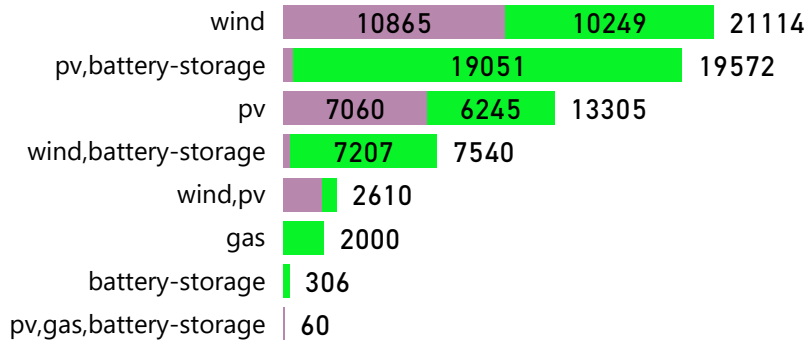
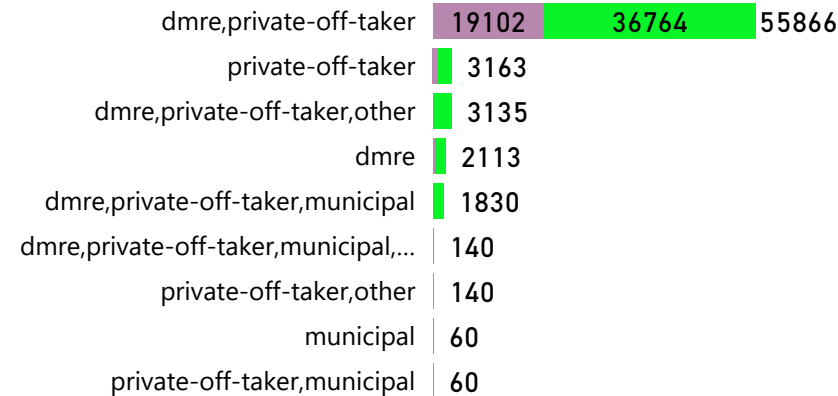


- battery-storage
- gas
- pv
- pv,battery-storage
- pv,gas,battery-storage
- wind
- wind,battery-storage
- wind,pv

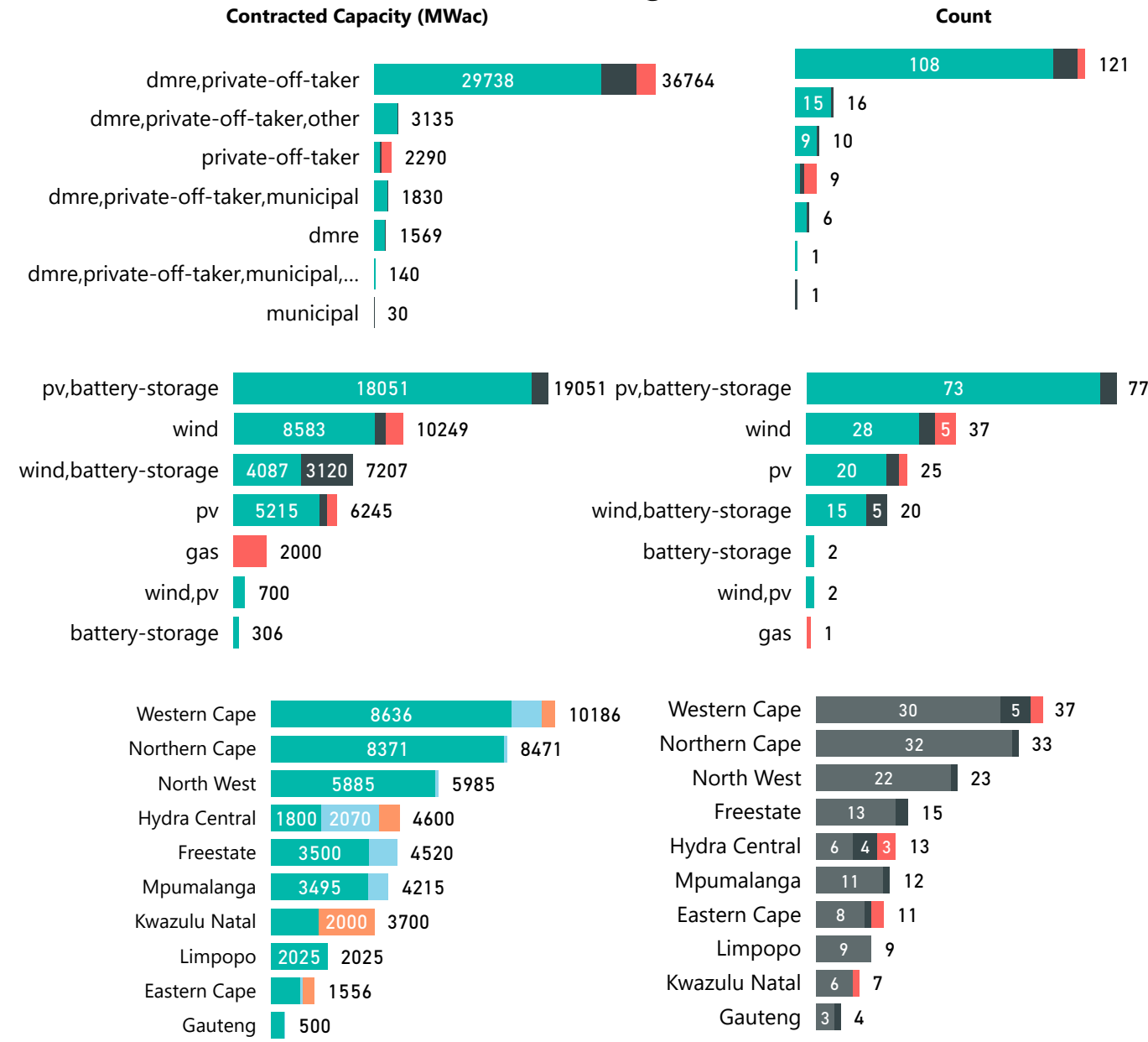


Curtailment (Yes /No) MWac 66507

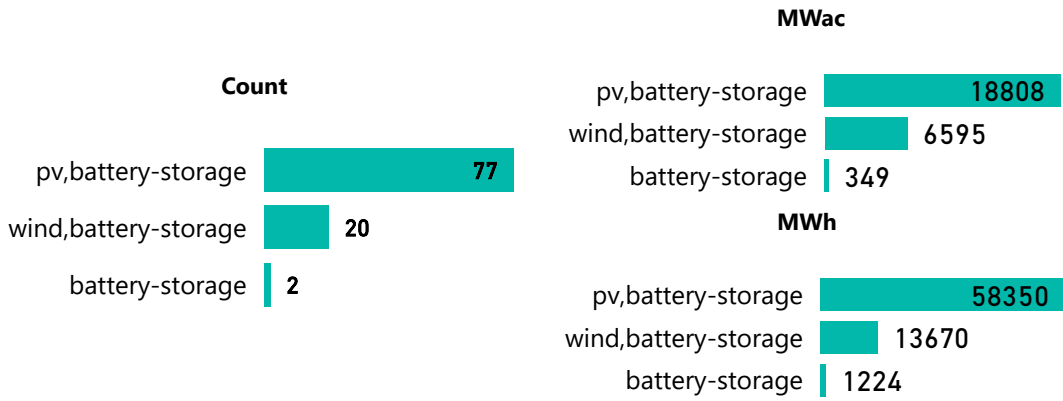
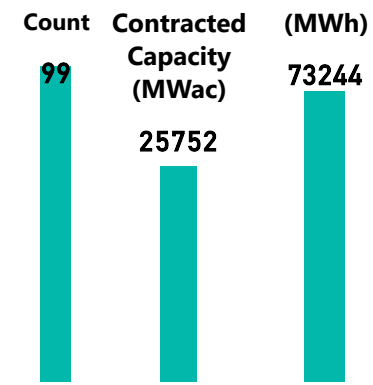
no yes



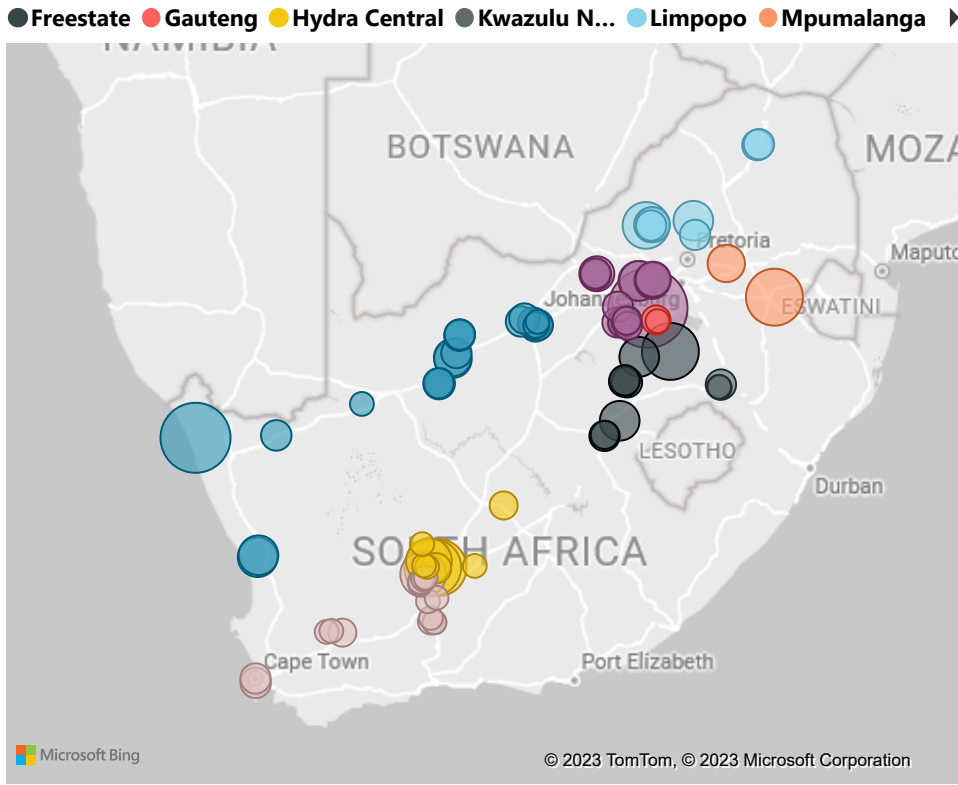
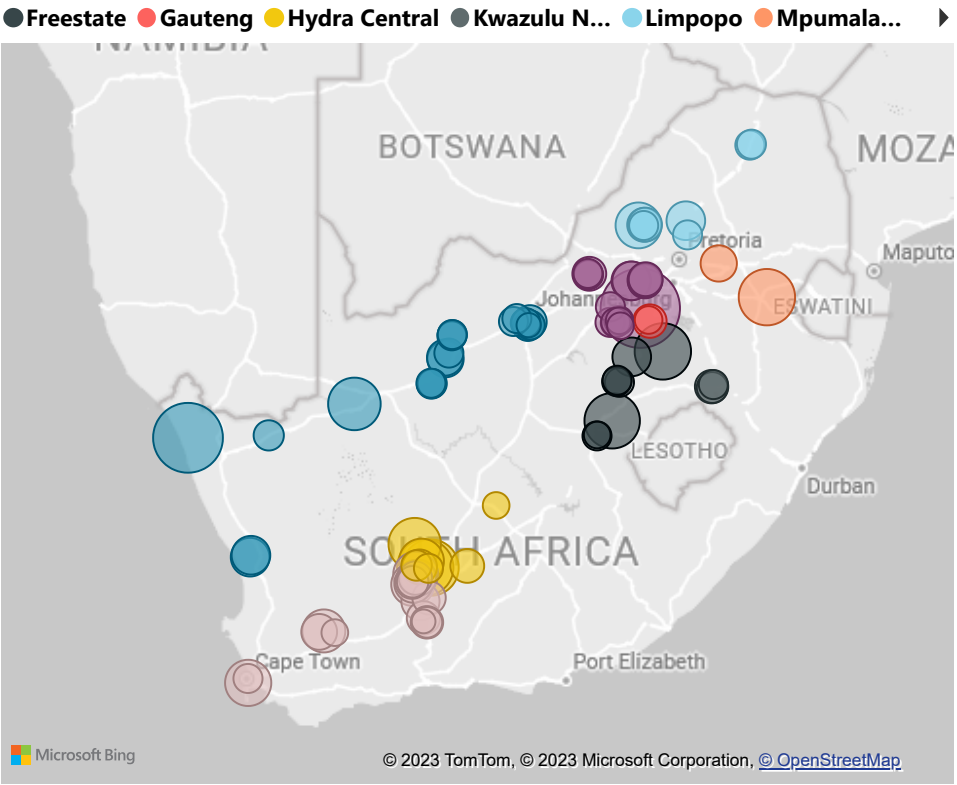
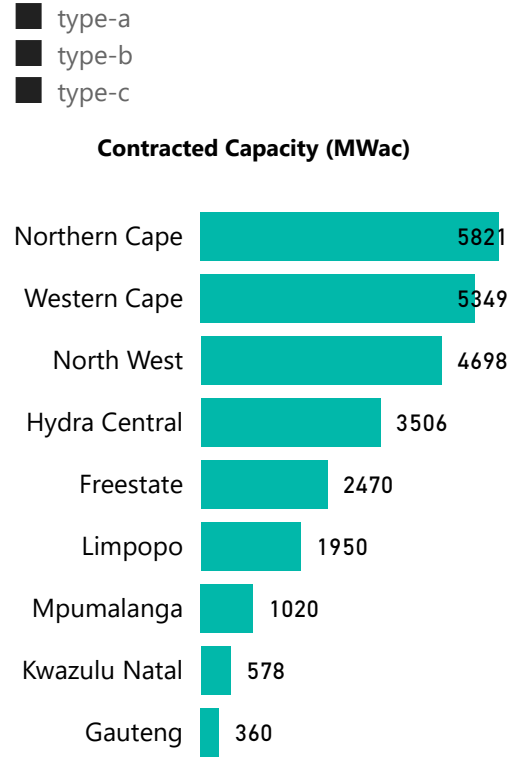
Curtailment (Yes) - Annual Percentage



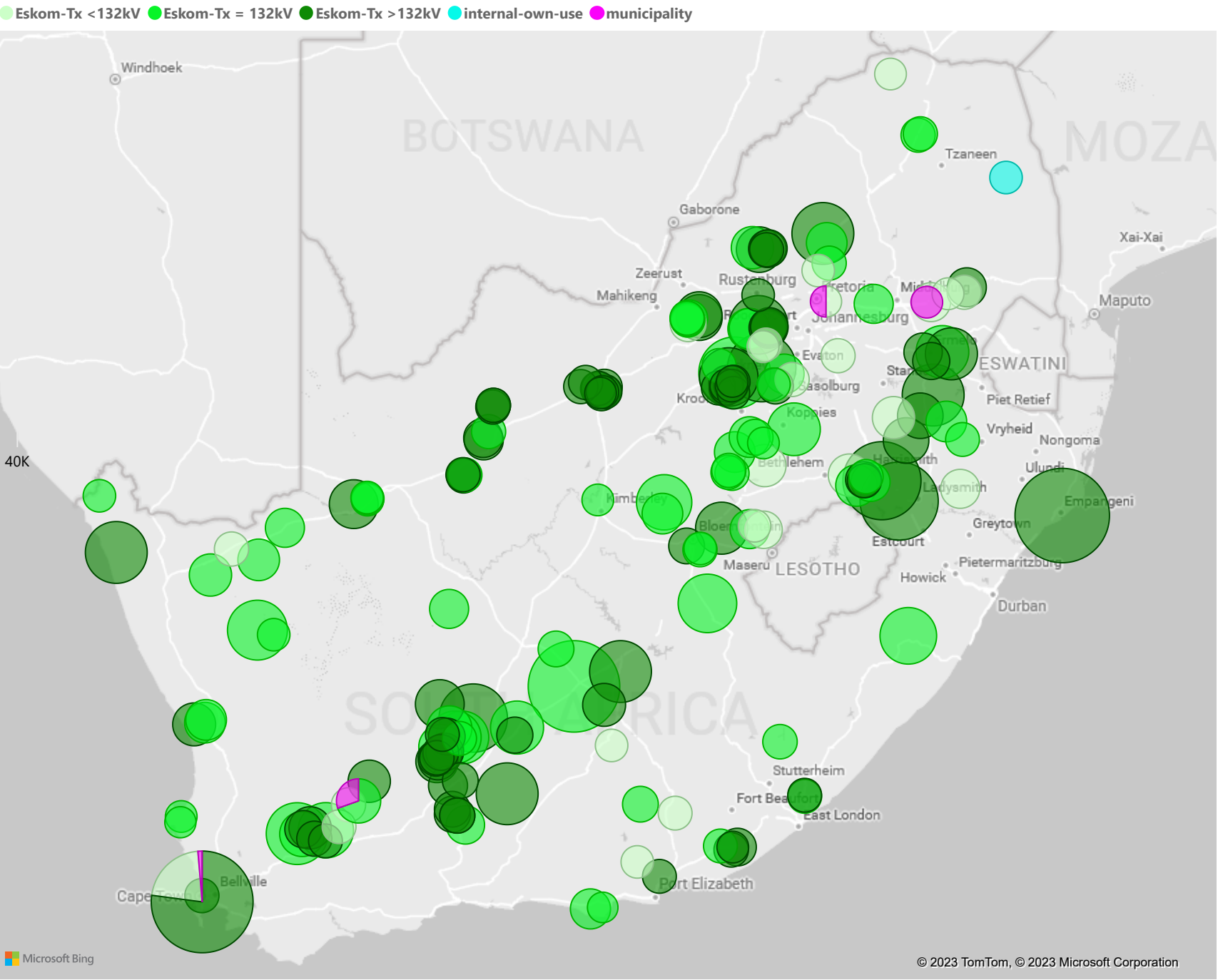
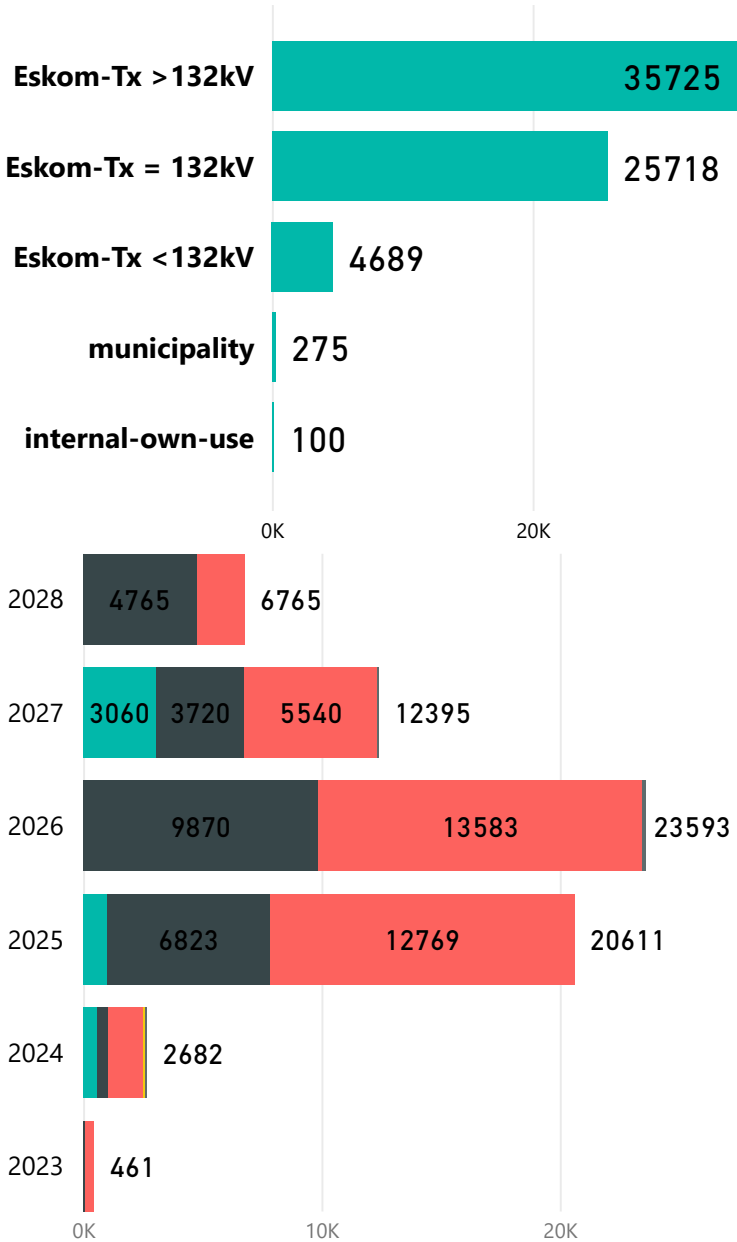
Battery



Substation	5.7. Size of Plant (MWac) - Battery Storage	MWh of Battery Storage
Philippi	9	10
Galenia	40	250
Komsberg	50	200
Mookodi	50	200
Philippi	99	100
Mercury	99	400
Harvard	100	400
Hydra	100	400
Mercury	100	400
Scafell	120	480
Hermes	149	600

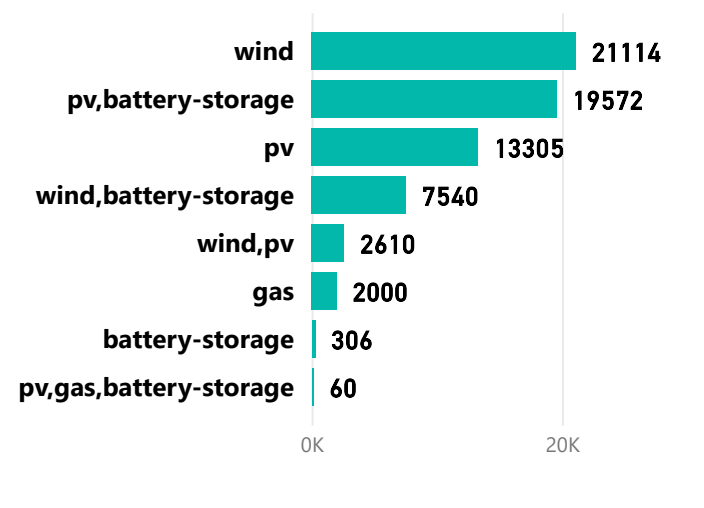
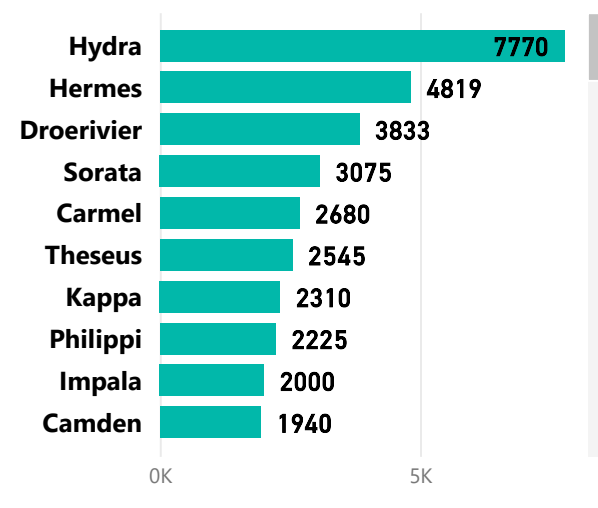
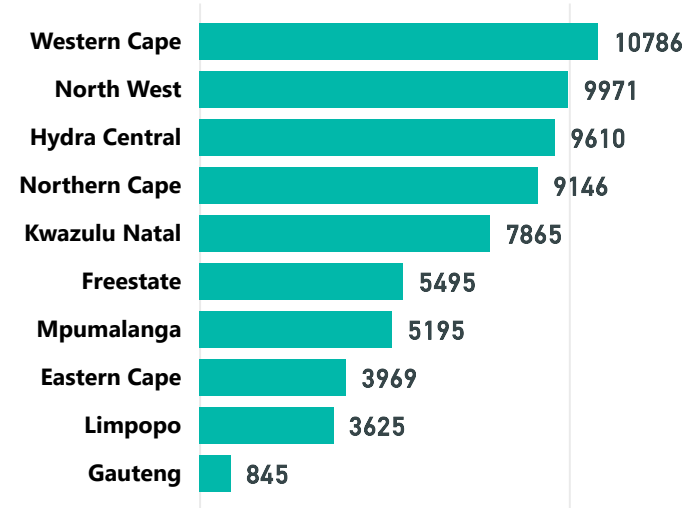


Access Tx,Dx, Own use & Munic

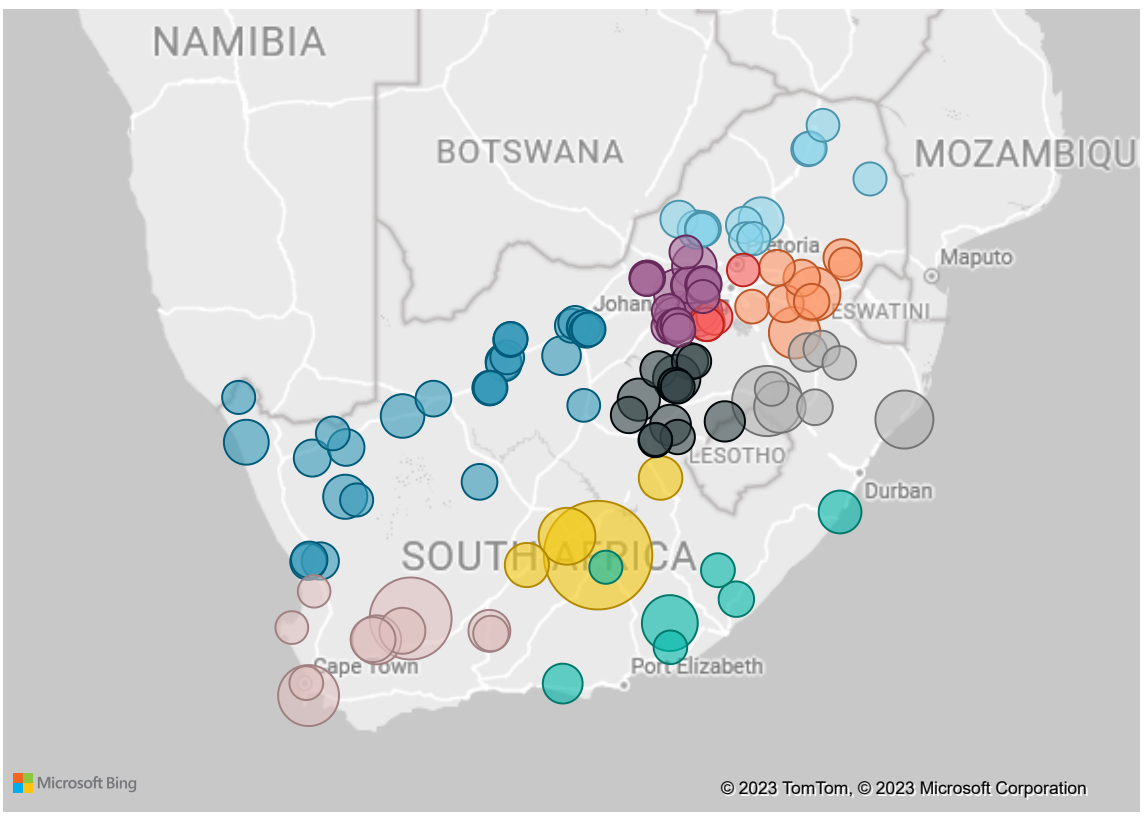


Grid Interest

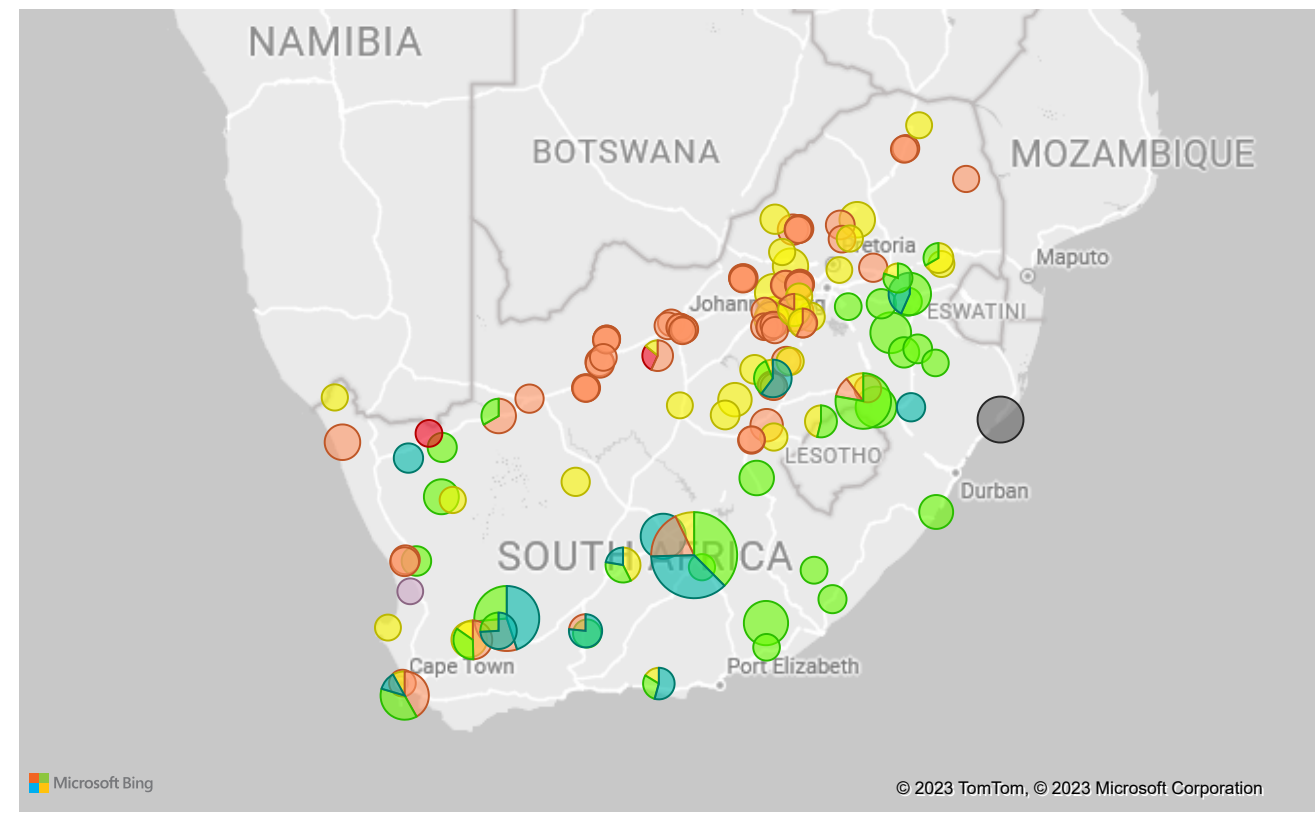
- type-a
- type-b
- type-c



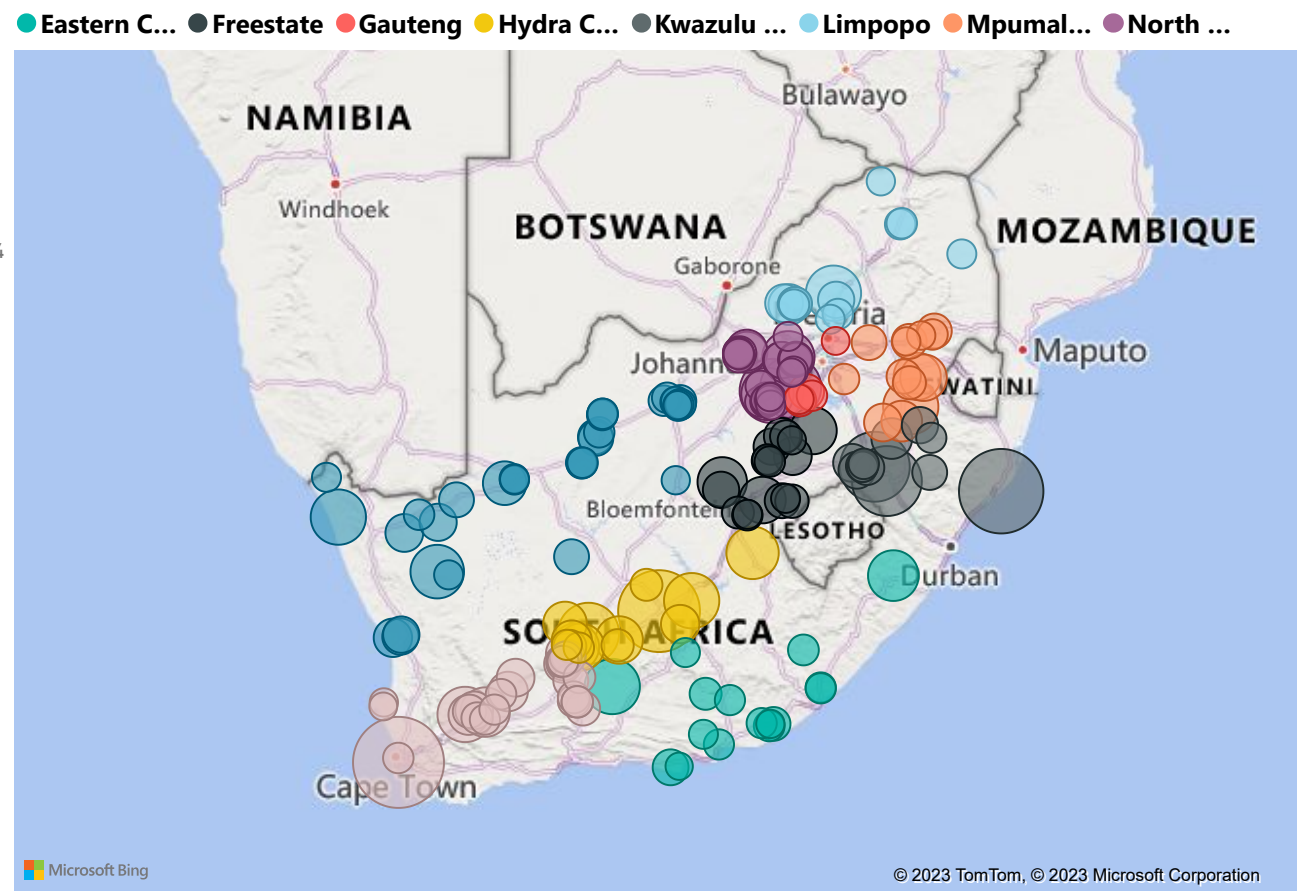
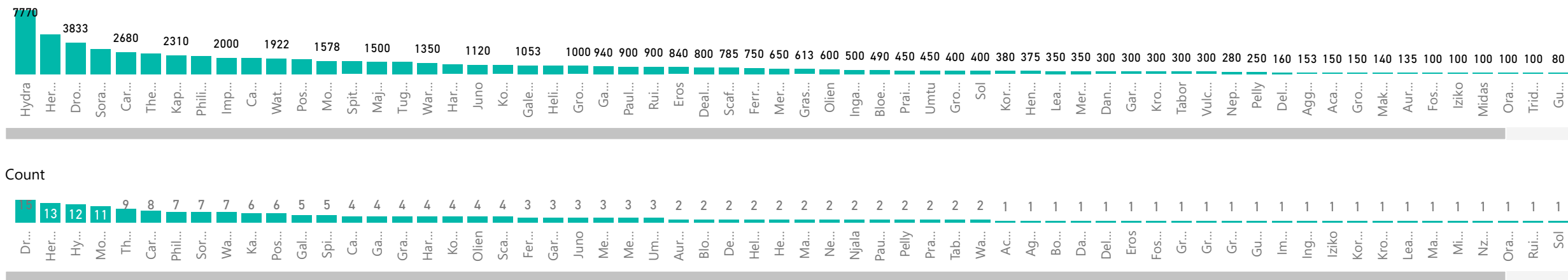
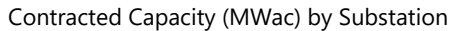
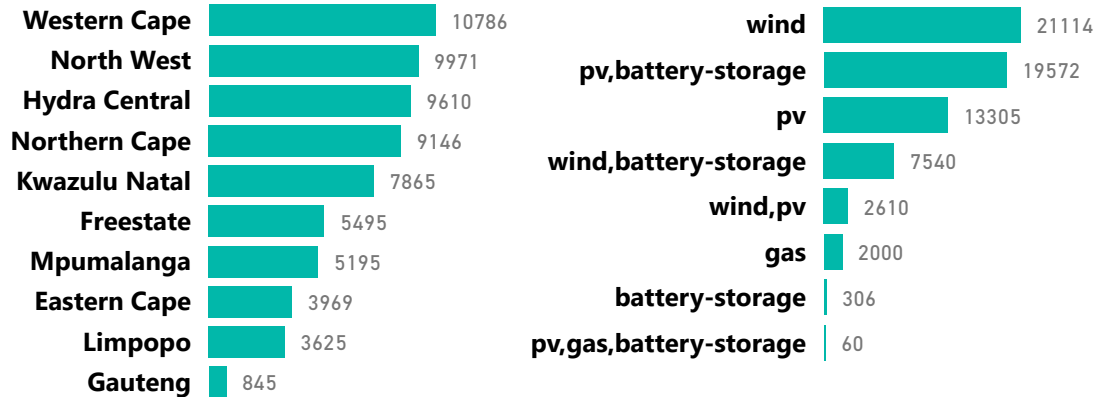
- Eastern C...
- Freestate
- Gauteng
- Hydra C...
- Kwazulu ...
- Limpopo
- Mpumal...



- battery-storage
- gas
- pv
- pv,battery-storage
- pv,gas,batter...
- wind
- wind,batter...
- wind,pv



Grid at Substation



The End