

# 2023 (June) South African Renewable Energy Grid Survey



## Results Summary

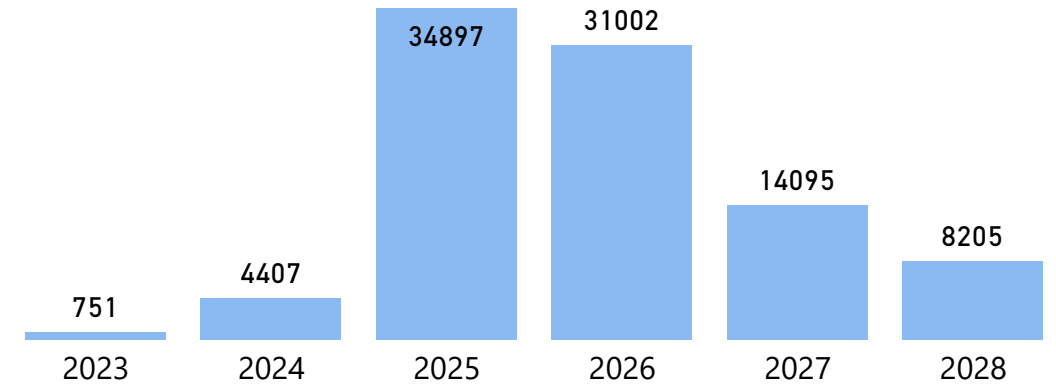
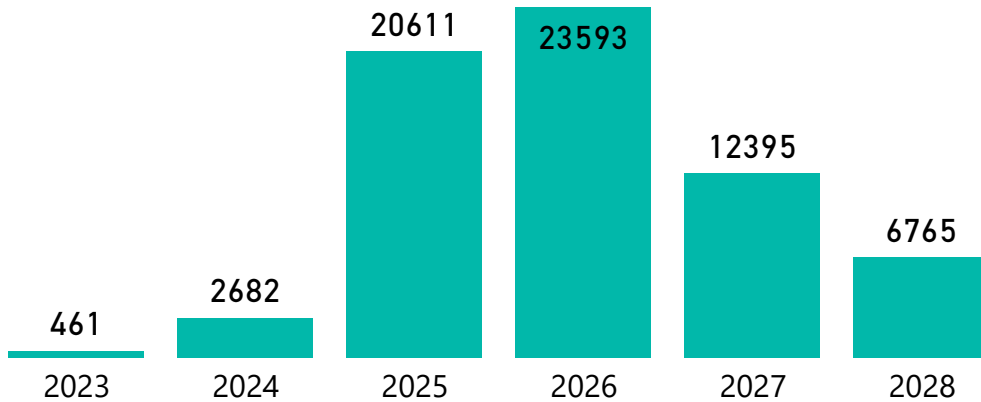
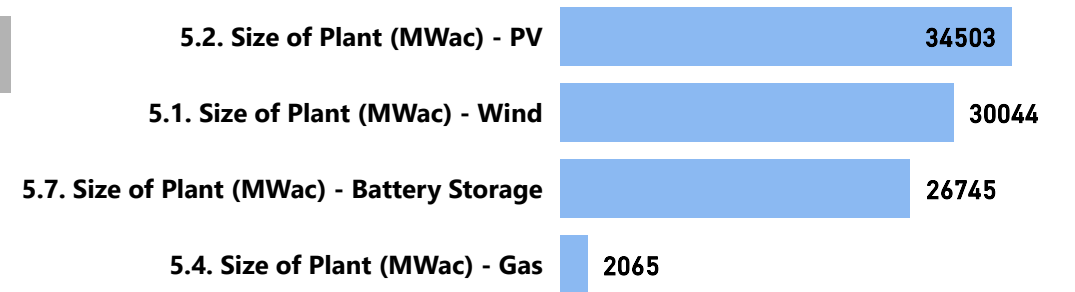
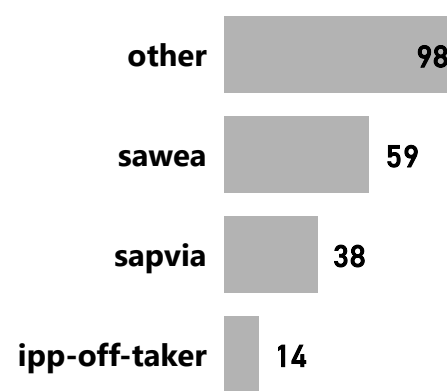
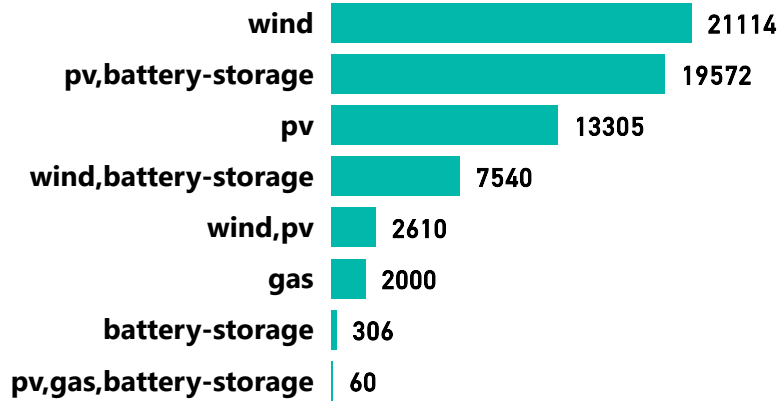
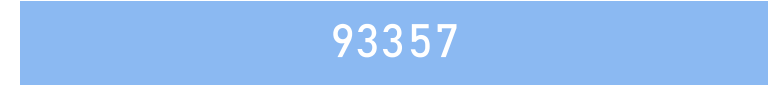
### Contracted (MWac)



### Contributions



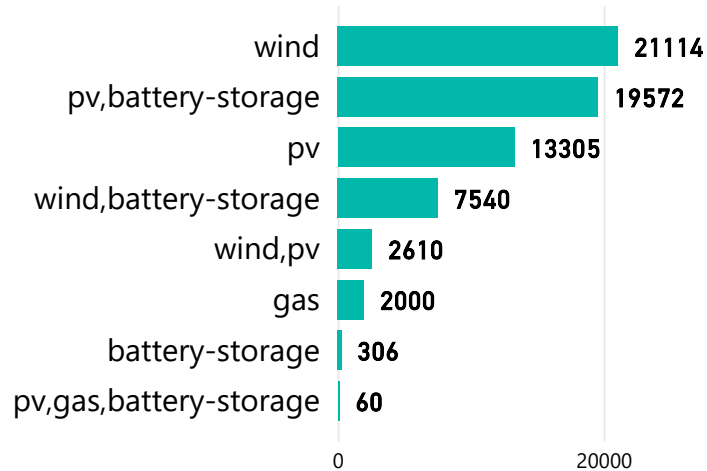
### Installed (MWac)



# 2023 South African Renewable Energy Grid Survey

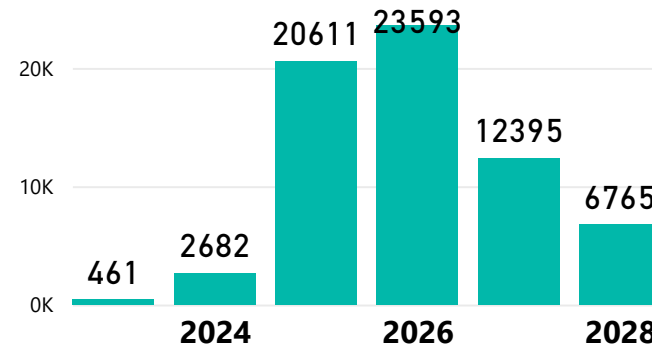


## Contracted vs Installed



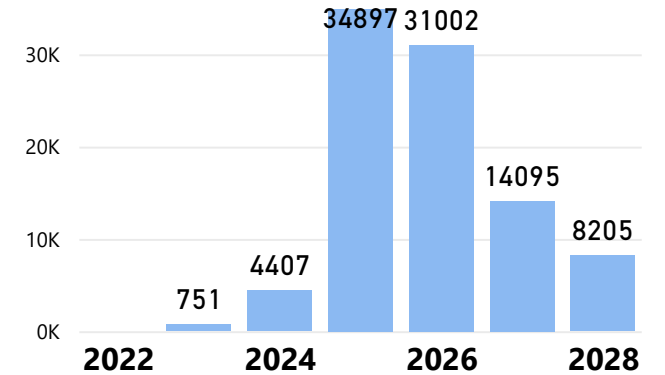
## Contracted (MWac)

66507



## Installed (MWac)

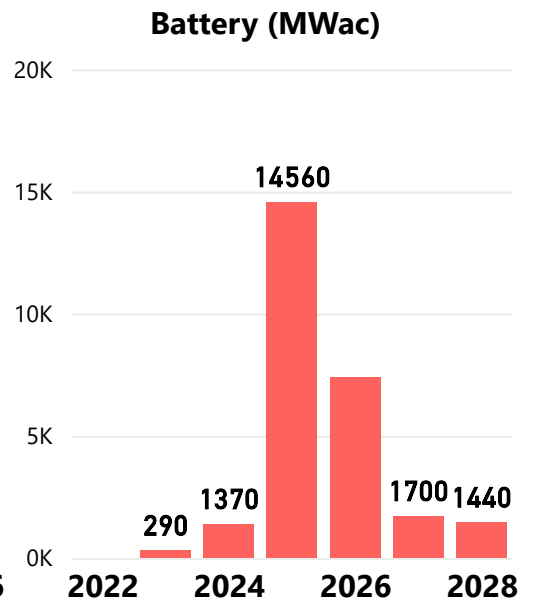
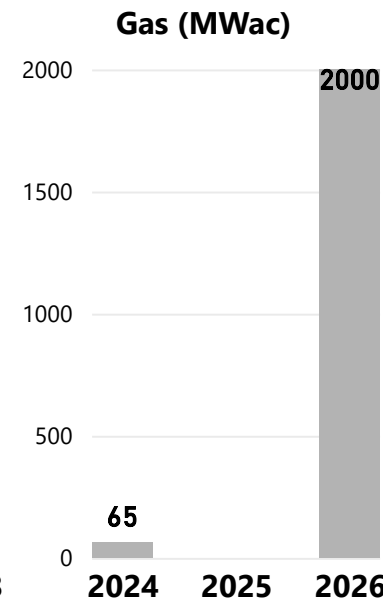
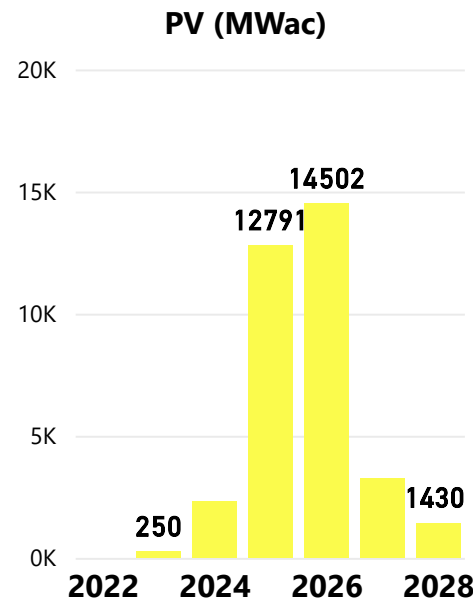
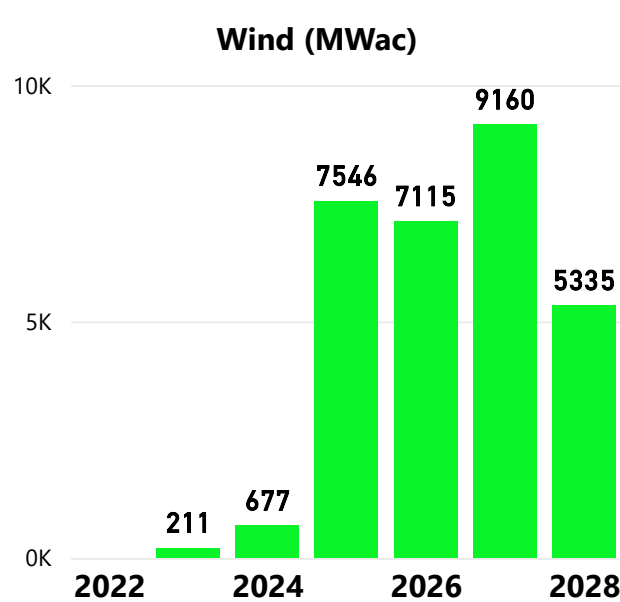
93357



## Contributions

209

## Technology



# 2023 South African Renewable Energy Grid Survey



## 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

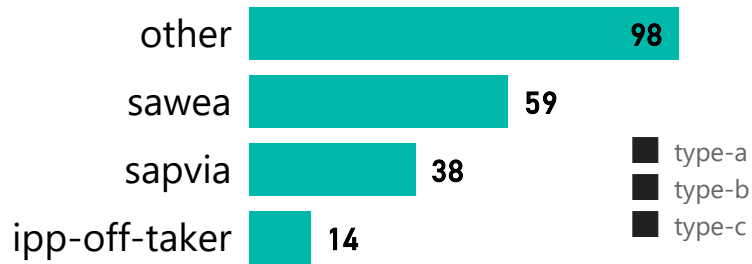
### C: Project is in Early stage of Development.

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.

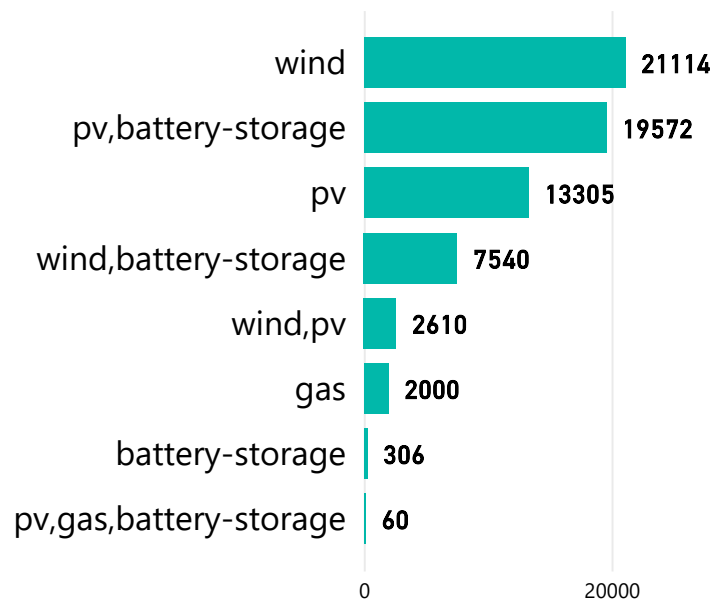
# 2023 South African Renewable Energy Grid Survey



## Results Contracted (MWac)



## Technology



## Contracted (MWac)

66507

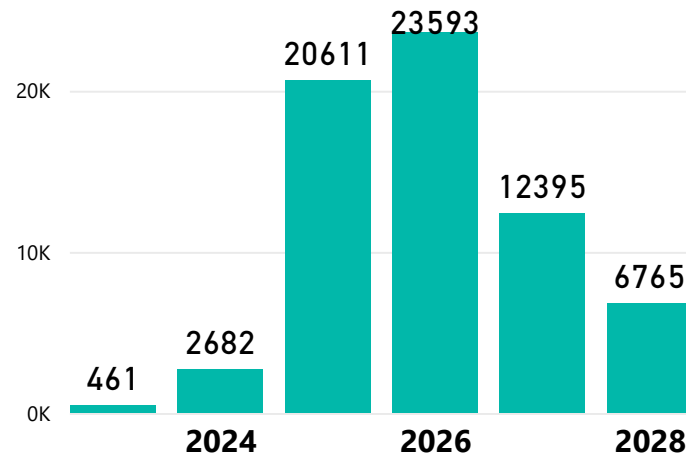
## Installed (MWac)

93357

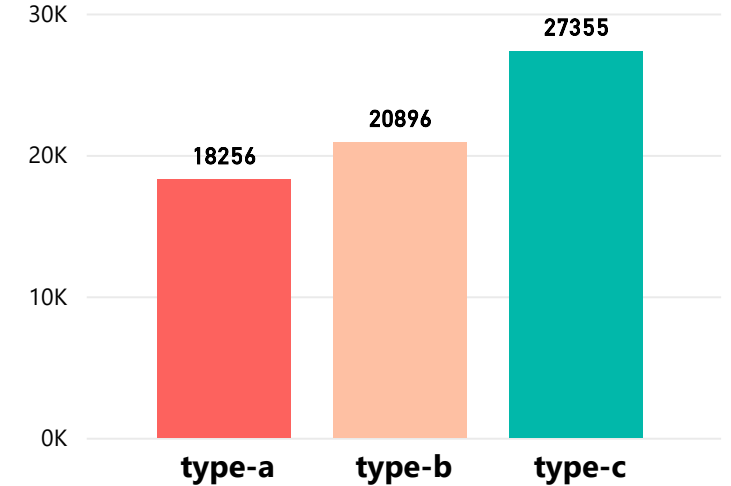
## Number of contributions

209

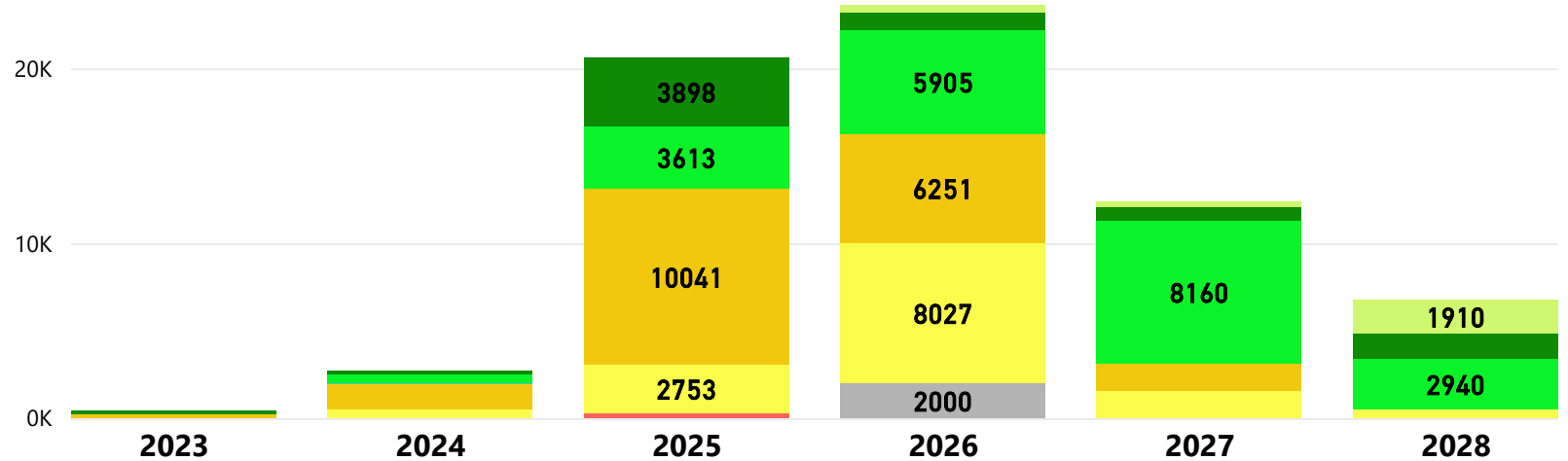
## Contracted (MWac) Annual build



## Project Status



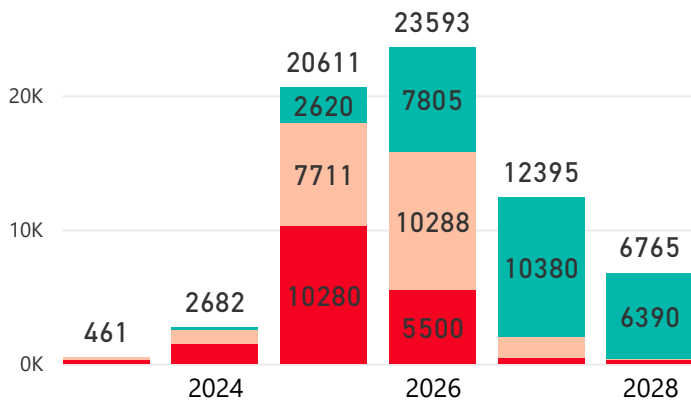
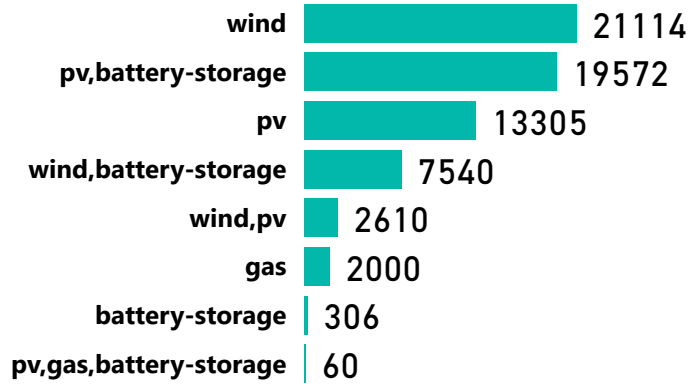
● battery-storage ● gas ● pv ● pv,battery-storage ● pv,gas,battery-storage ● wind ● wind,battery-storage ● wind,pv



# Project Type / Status

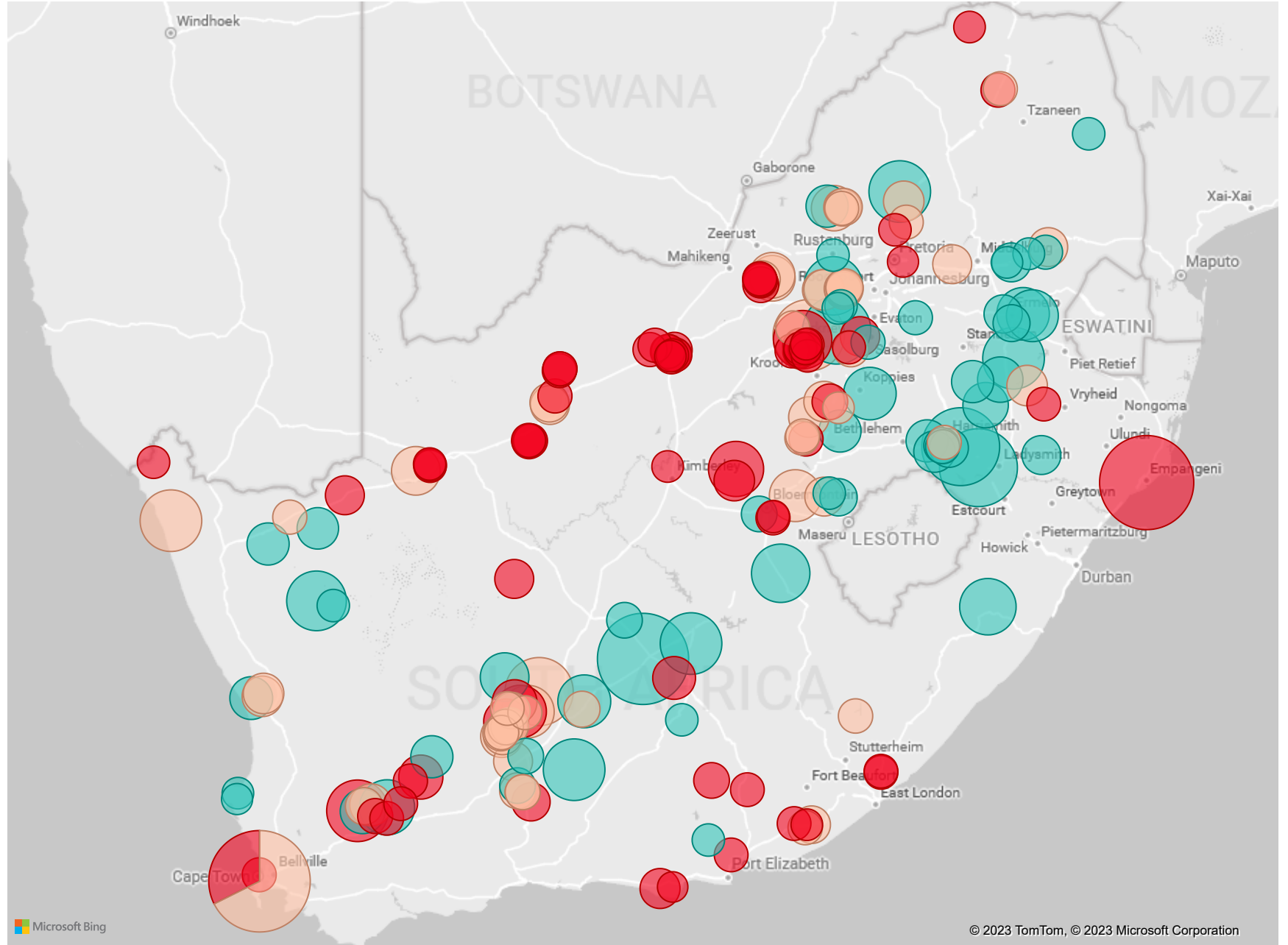
66507

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



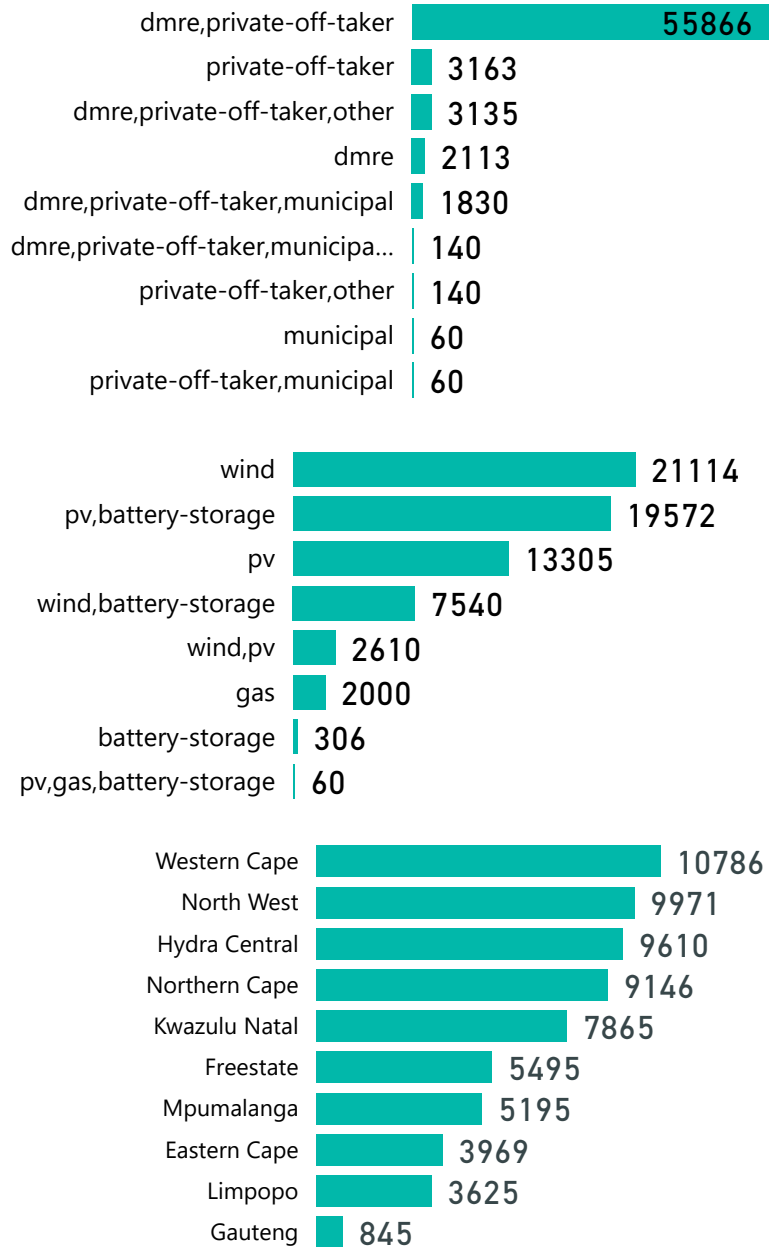
# 2023 South African Renewable Energy Grid Survey

● type-a ● type-b ● type-c



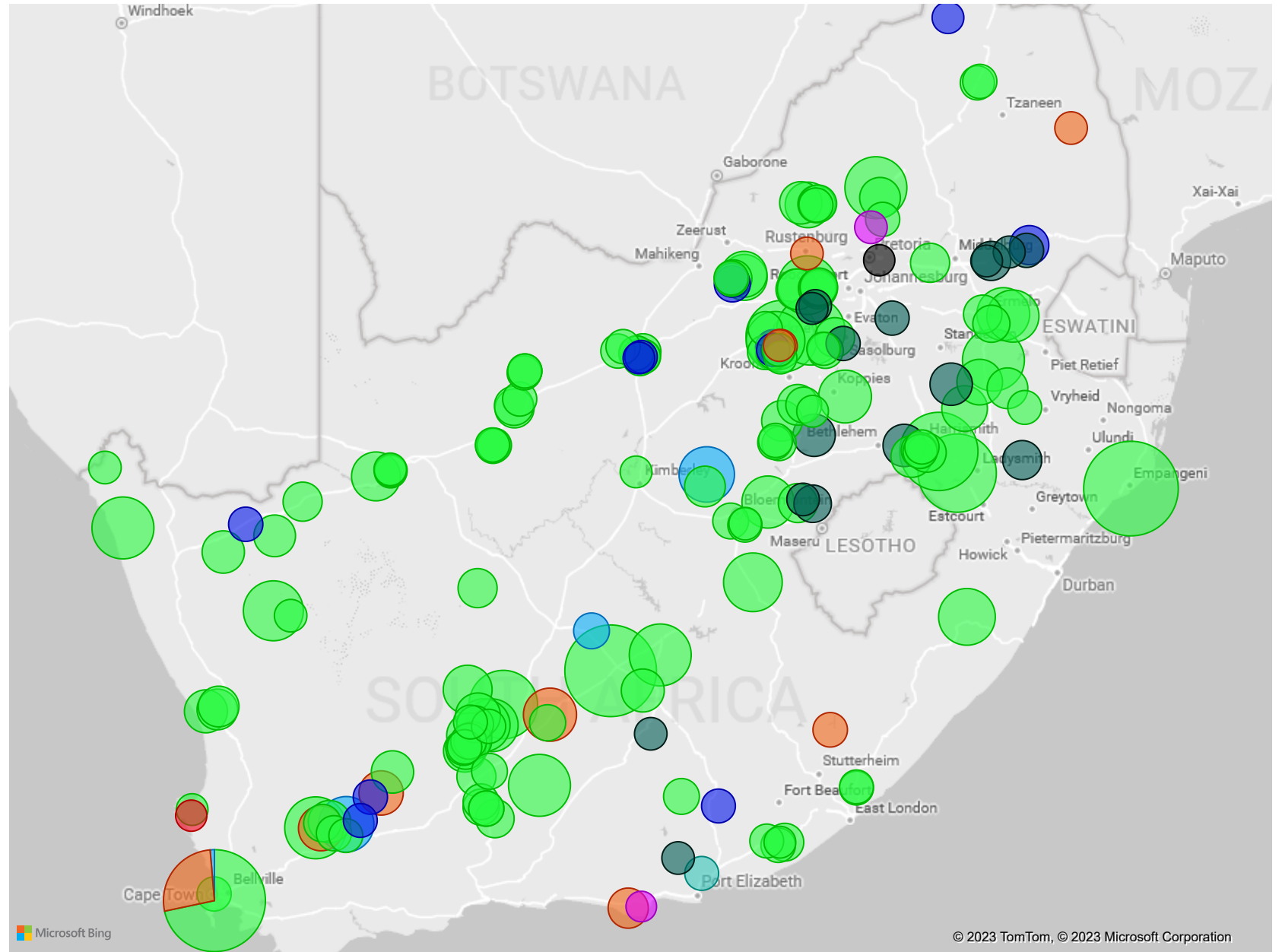
# DMRE vs Private (MWac)

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



# 2023 South African Renewable Energy Grid Survey

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

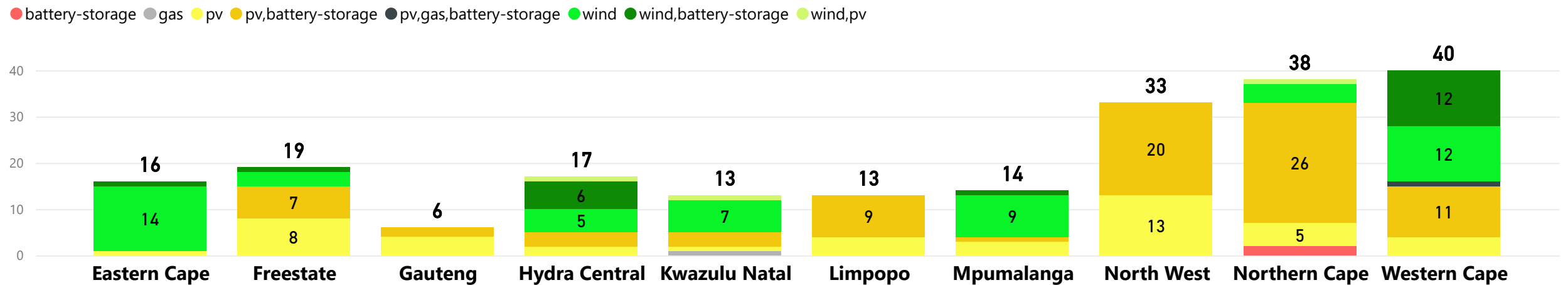
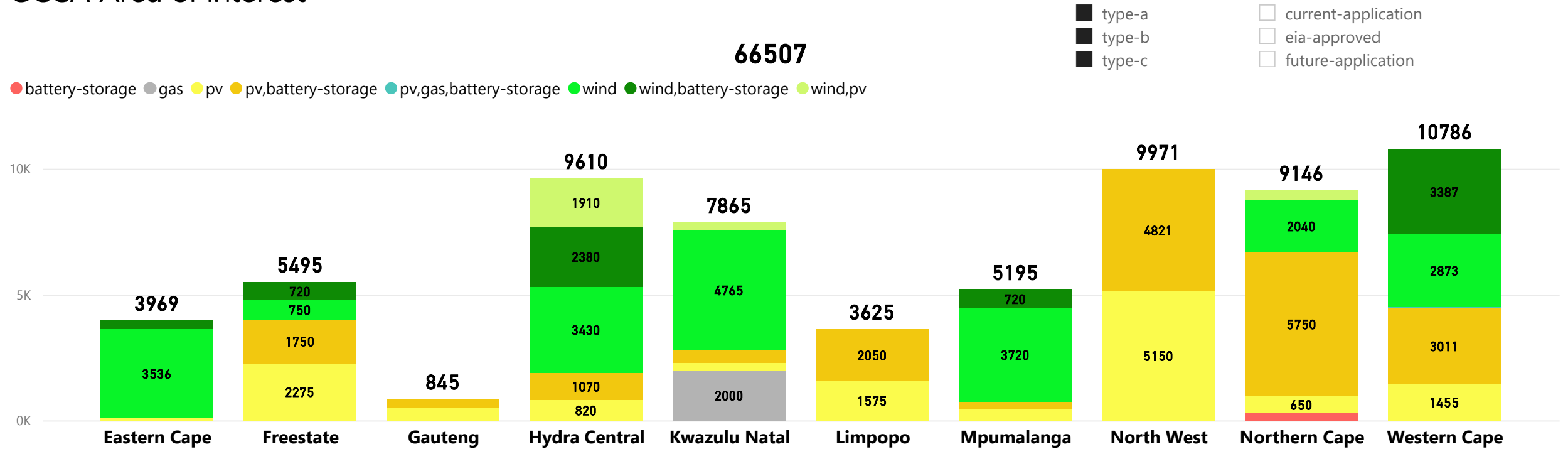


# 2023 South African Renewable Energy Grid Survey

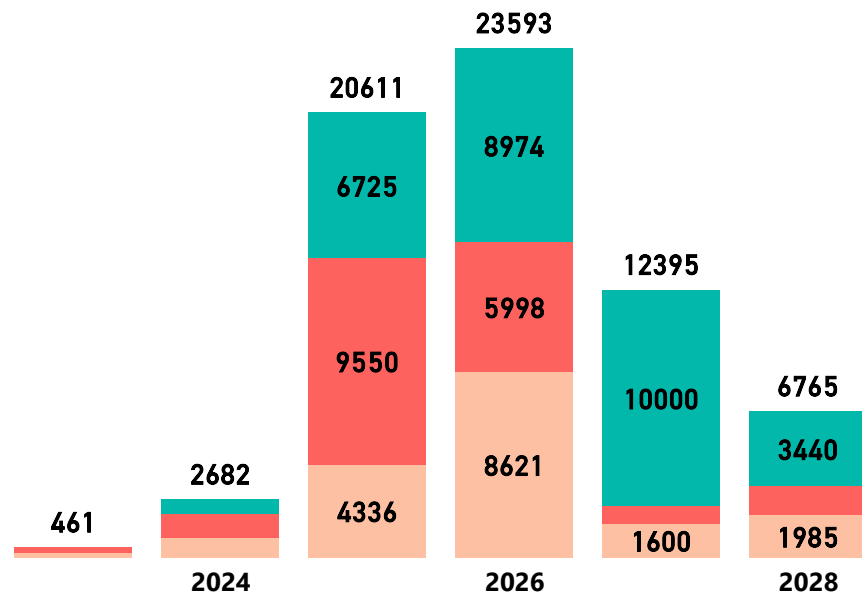
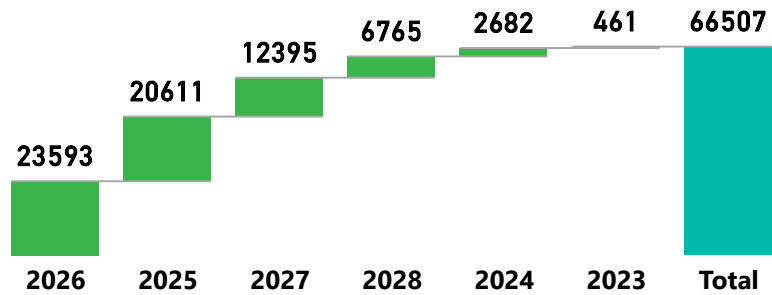


## GCCA Area of interest

66507



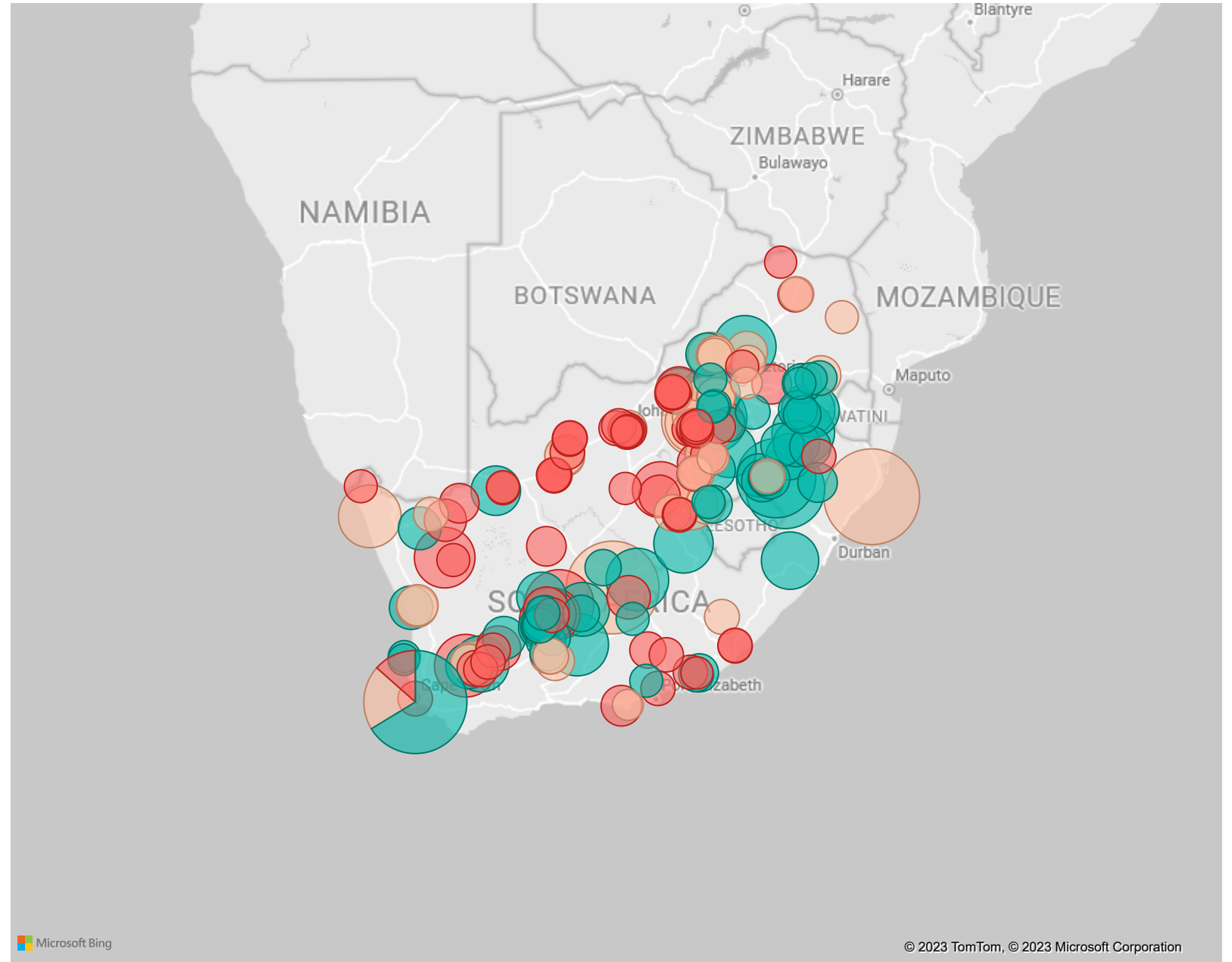
# EIA Ready (MWac)



# 2023 South African Renewable Energy Grid Survey



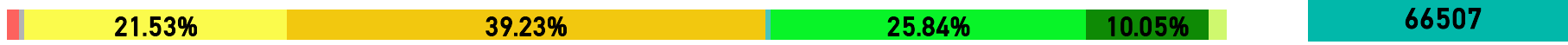
● current-application ● eia-approved ● future-application





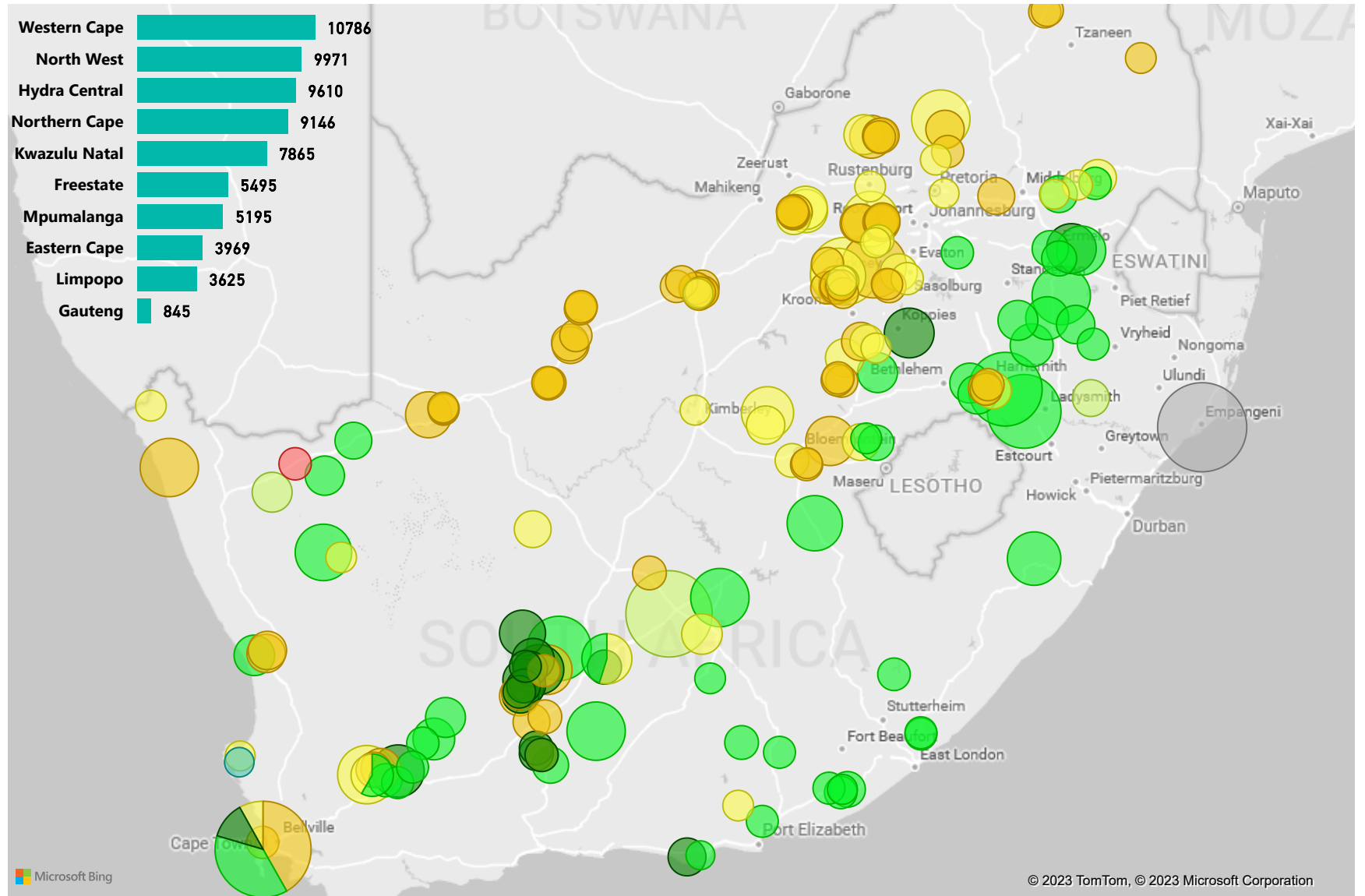
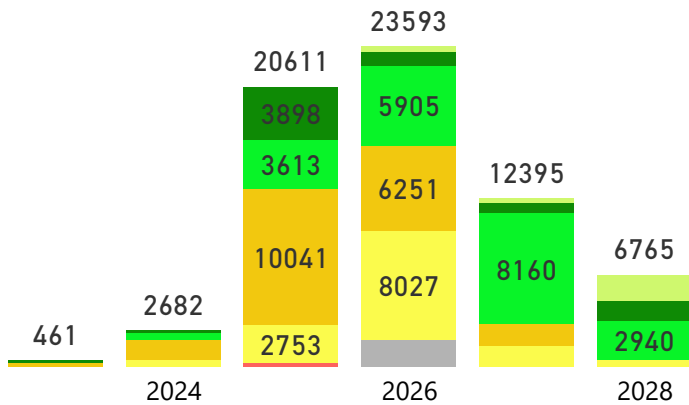
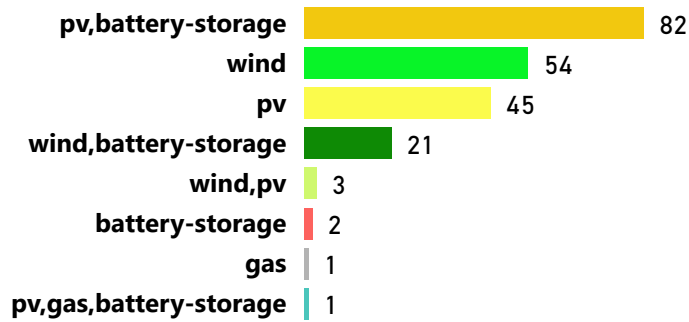
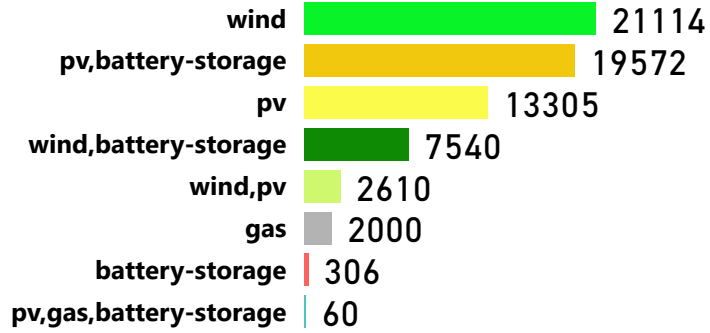
# Technology (MWac)

# 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

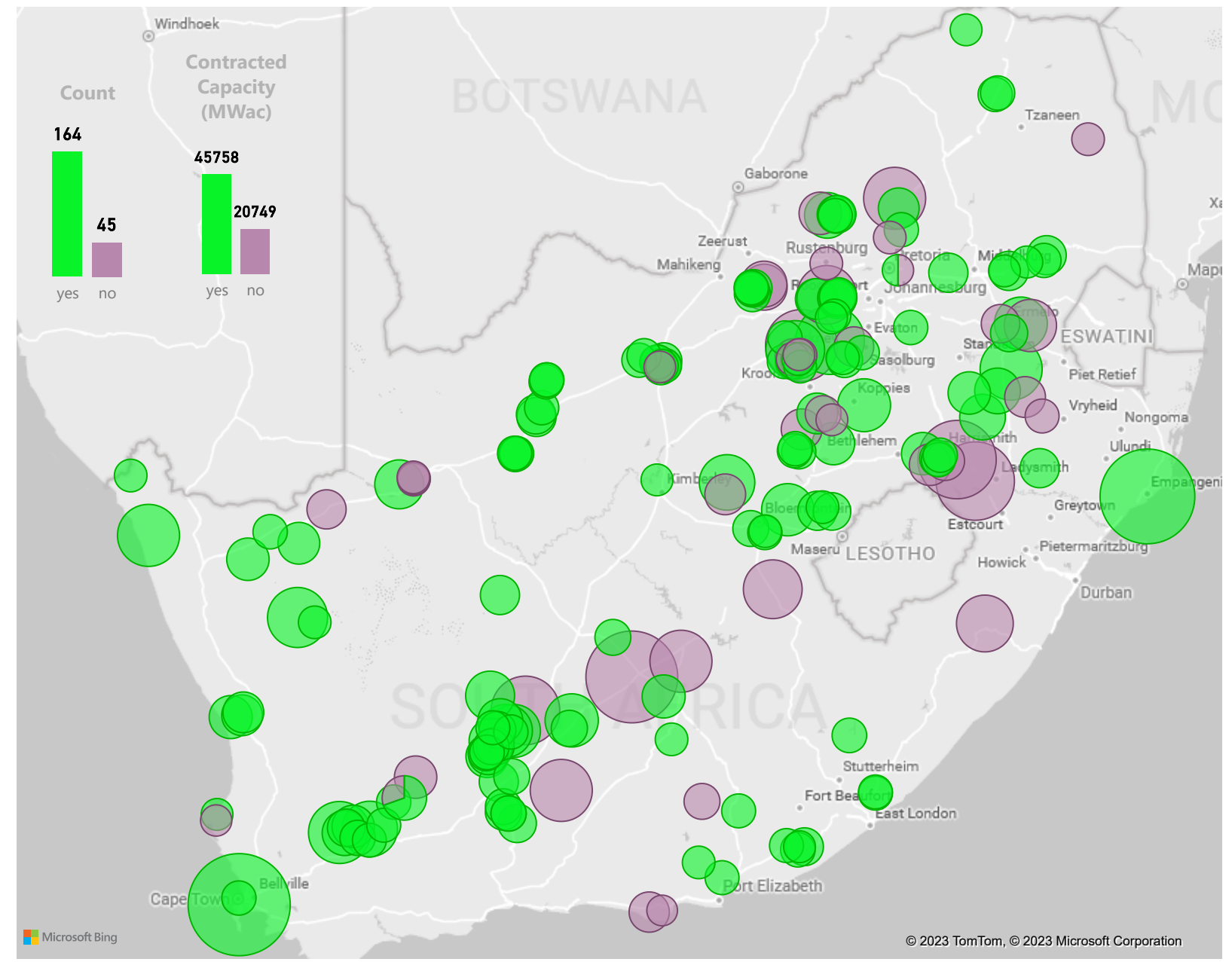
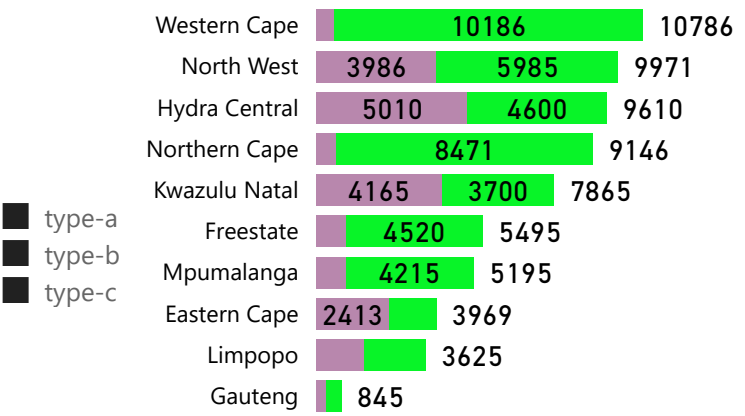
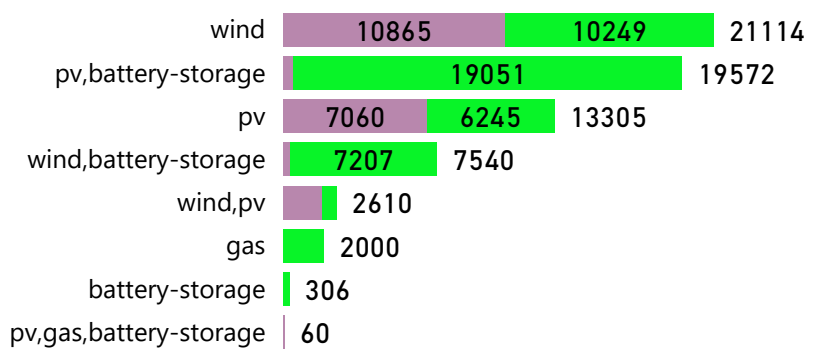
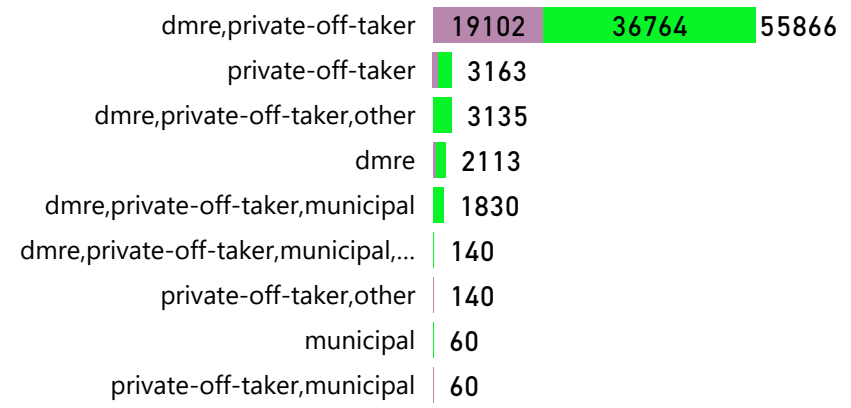


# 2023 South African Renewable Energy Grid Survey



Curtailment (Yes /No) MWac **66507**

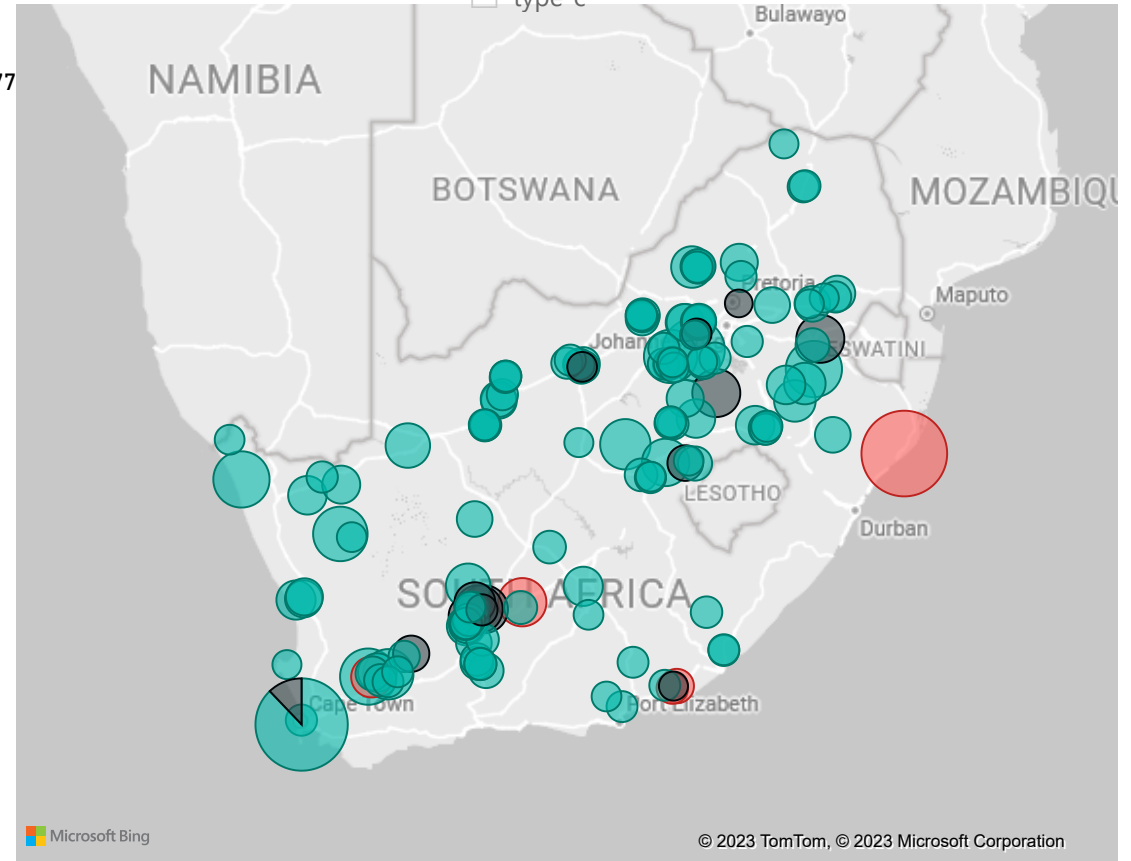
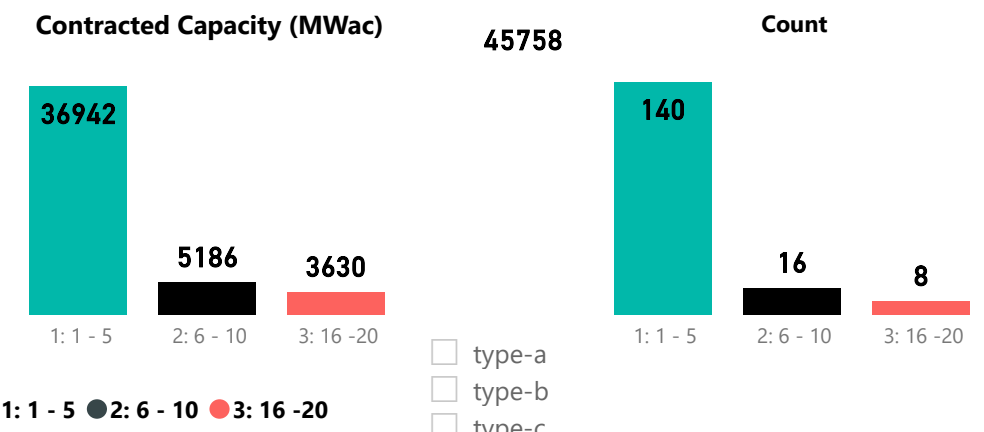
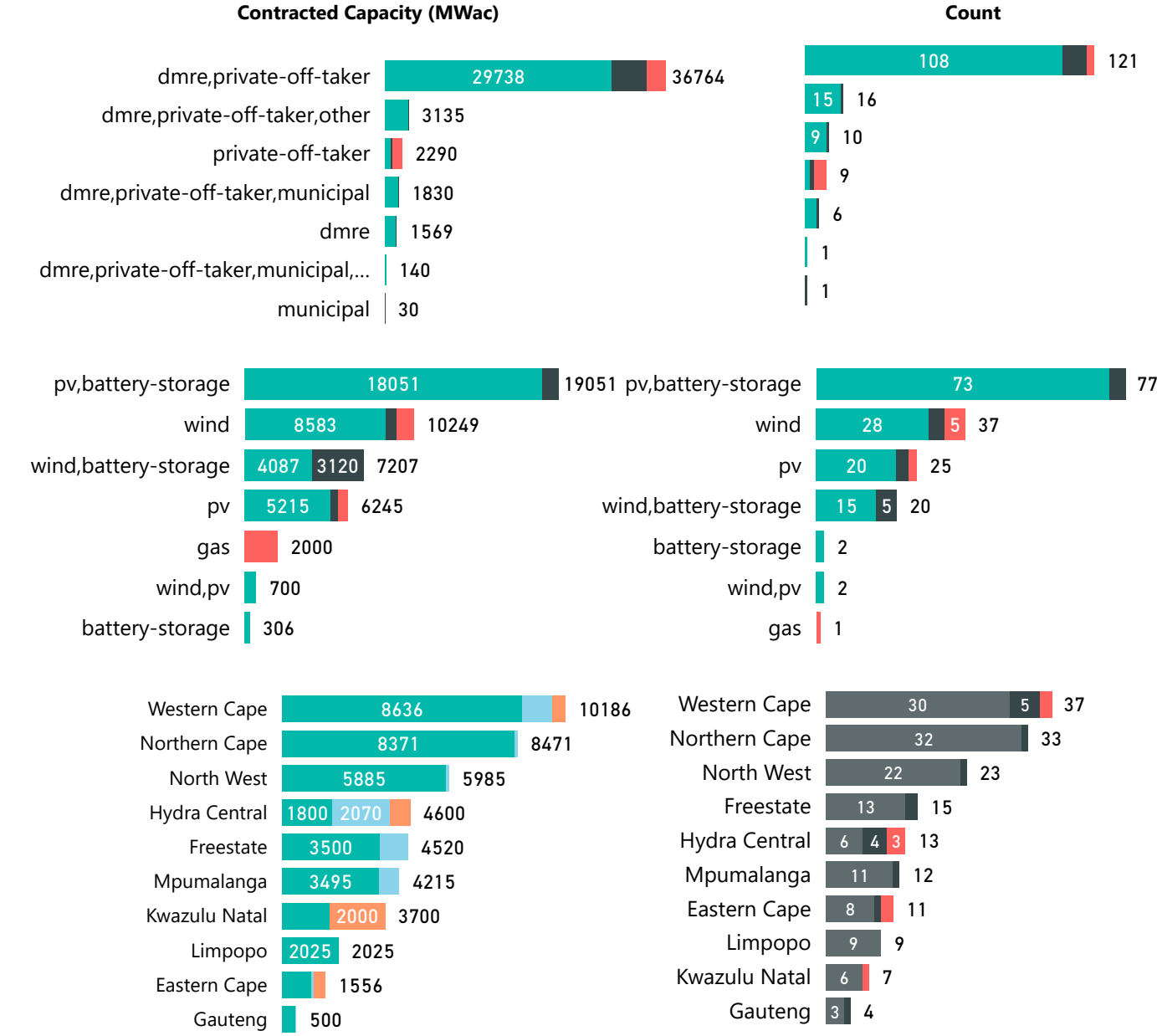
no yes



# 2023 South African Renewable Energy Grid Survey

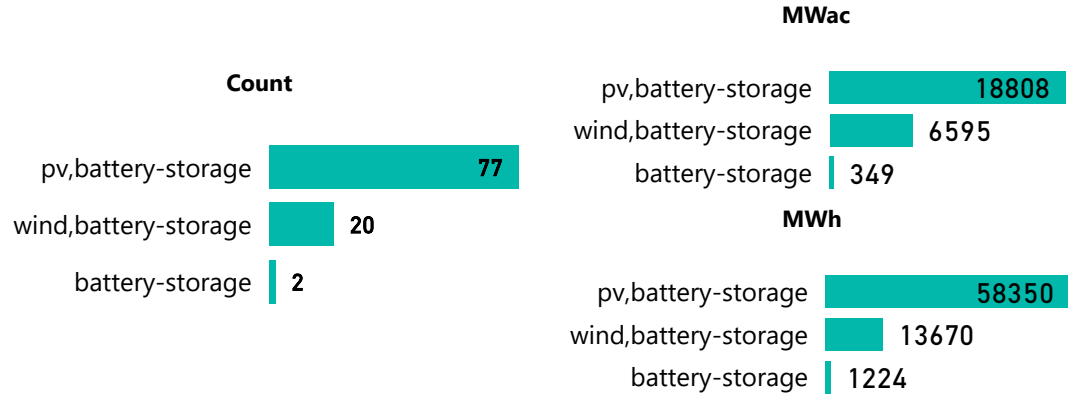
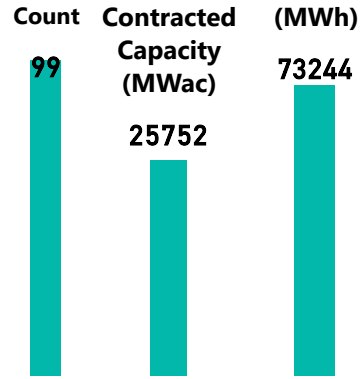


## Curtailment (Yes) - Annual Percentage



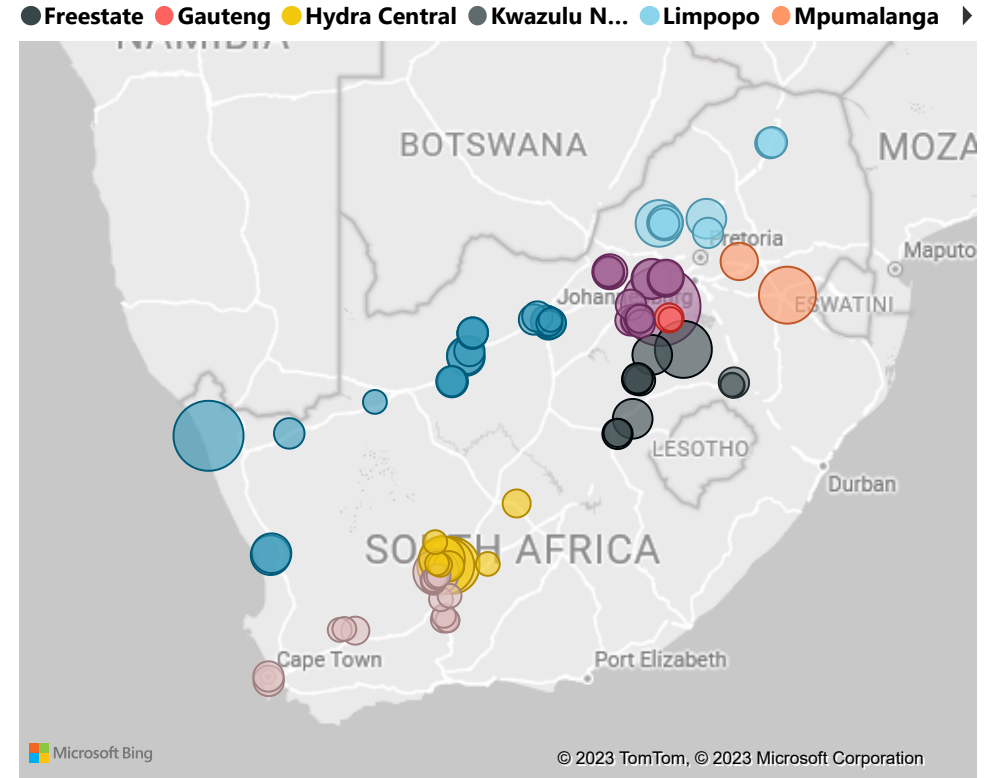
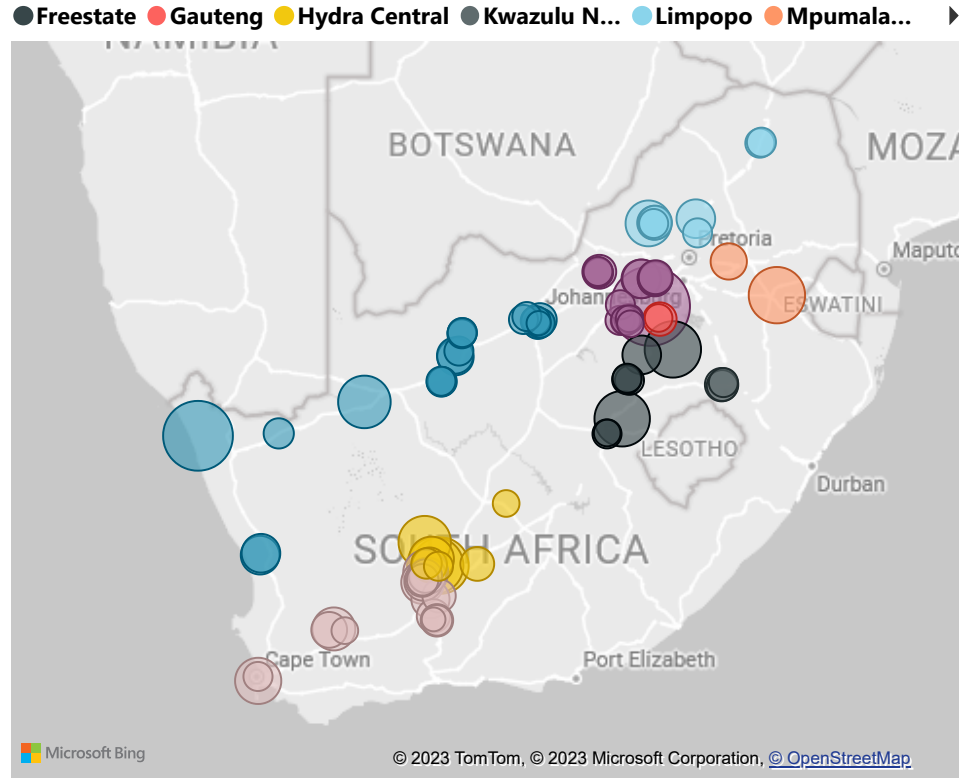
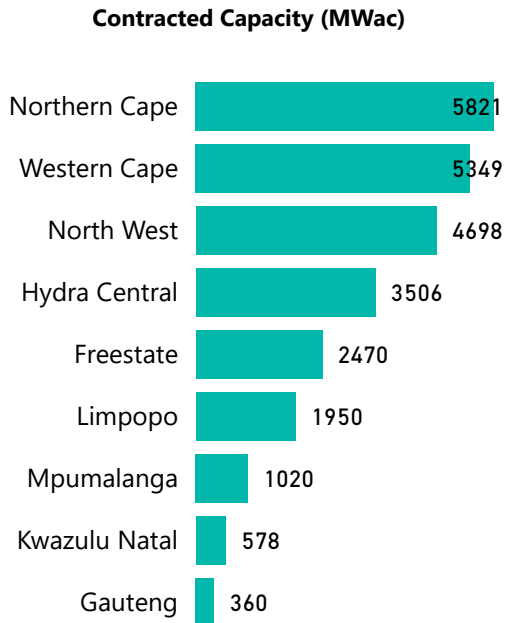
# Battery

## 2023 South African Renewable Energy Grid Survey

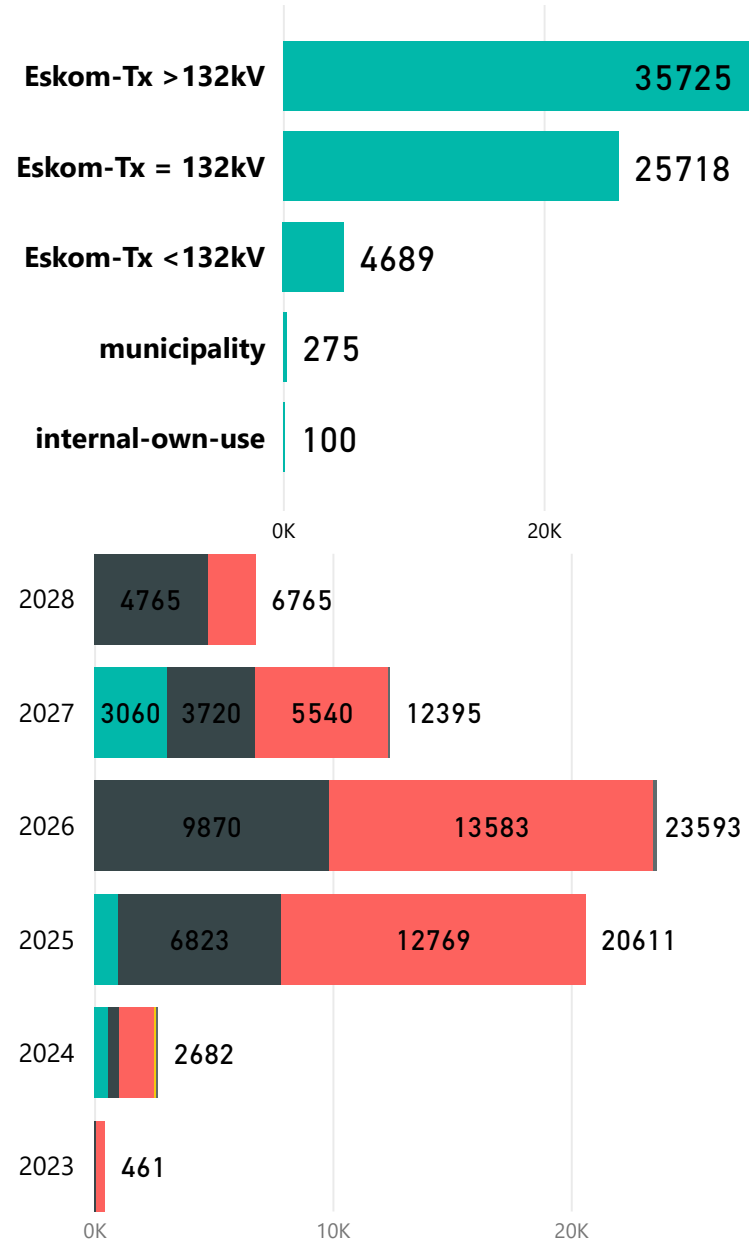


Substation	5.7. Size of Plant (MWac) - Battery Storage	MWh of Battery Storage
Philippi	9	10
Galenia	40	250
Komsberg	50	200
Mookodi	50	200
Philippi	99	100
Mercury	99	400
Harvard	100	400
Hydra	100	400
Mercury	100	400
Scafell	120	480
Hermes	149	600

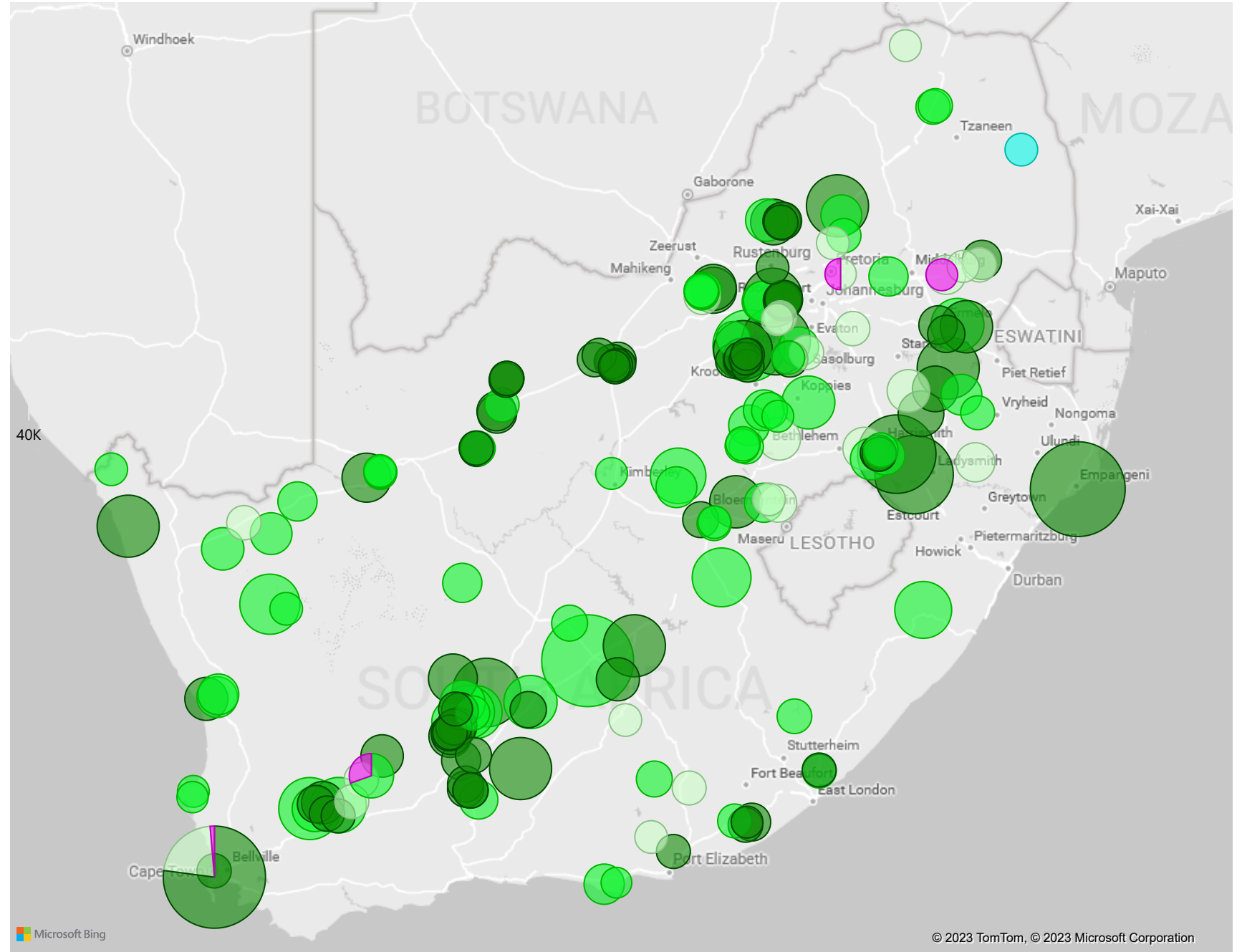
- type-a
- type-b
- type-c



# Access Tx,Dx, Own use & Munic

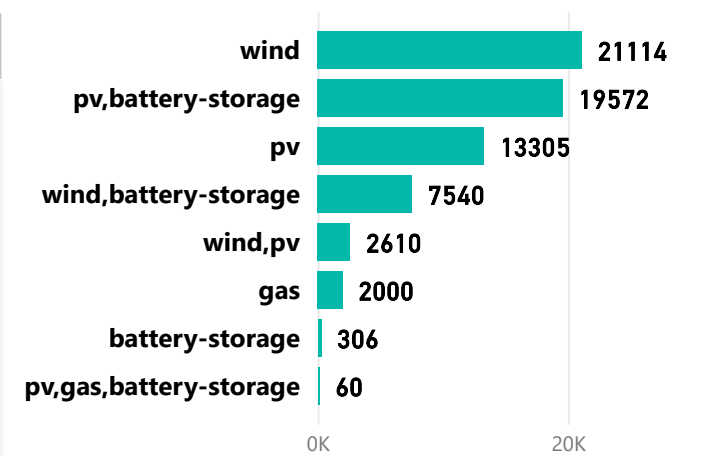
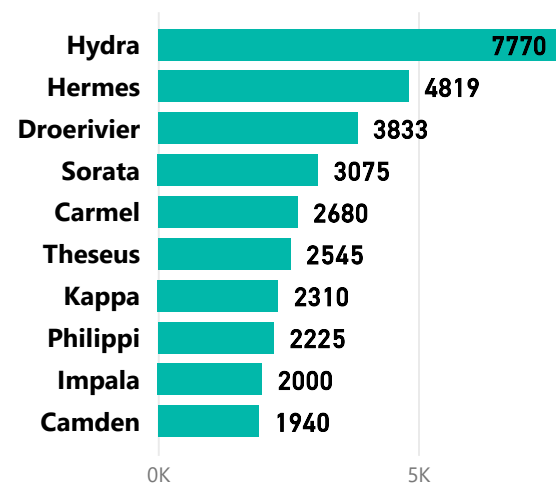
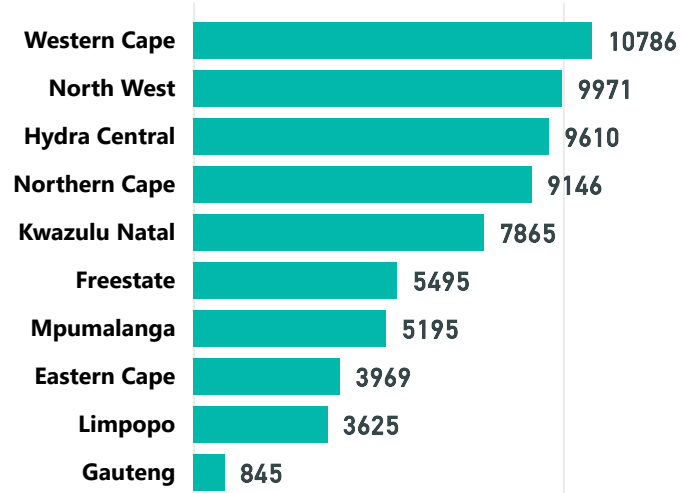


● Eskom-Tx < 132kV 
 ● Eskom-Tx = 132kV 
 ● Eskom-Tx > 132kV 
 ● internal-own-use 
 ● municipality

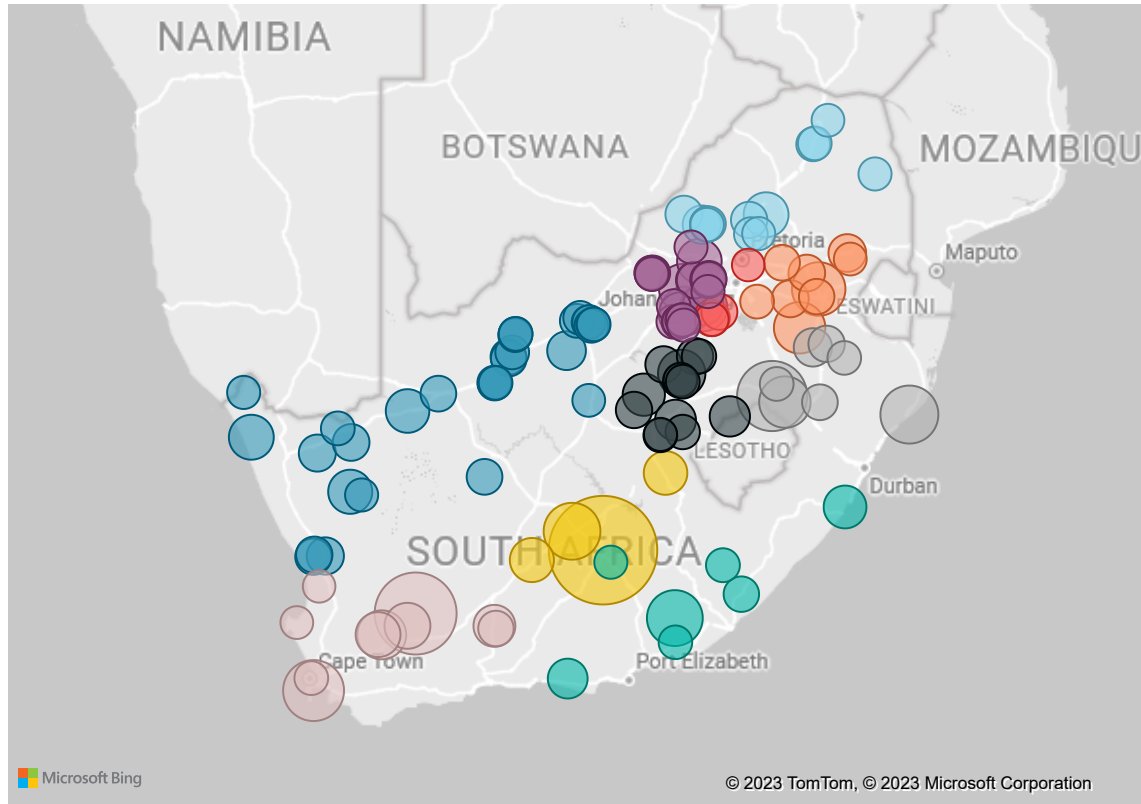


# Grid Interest

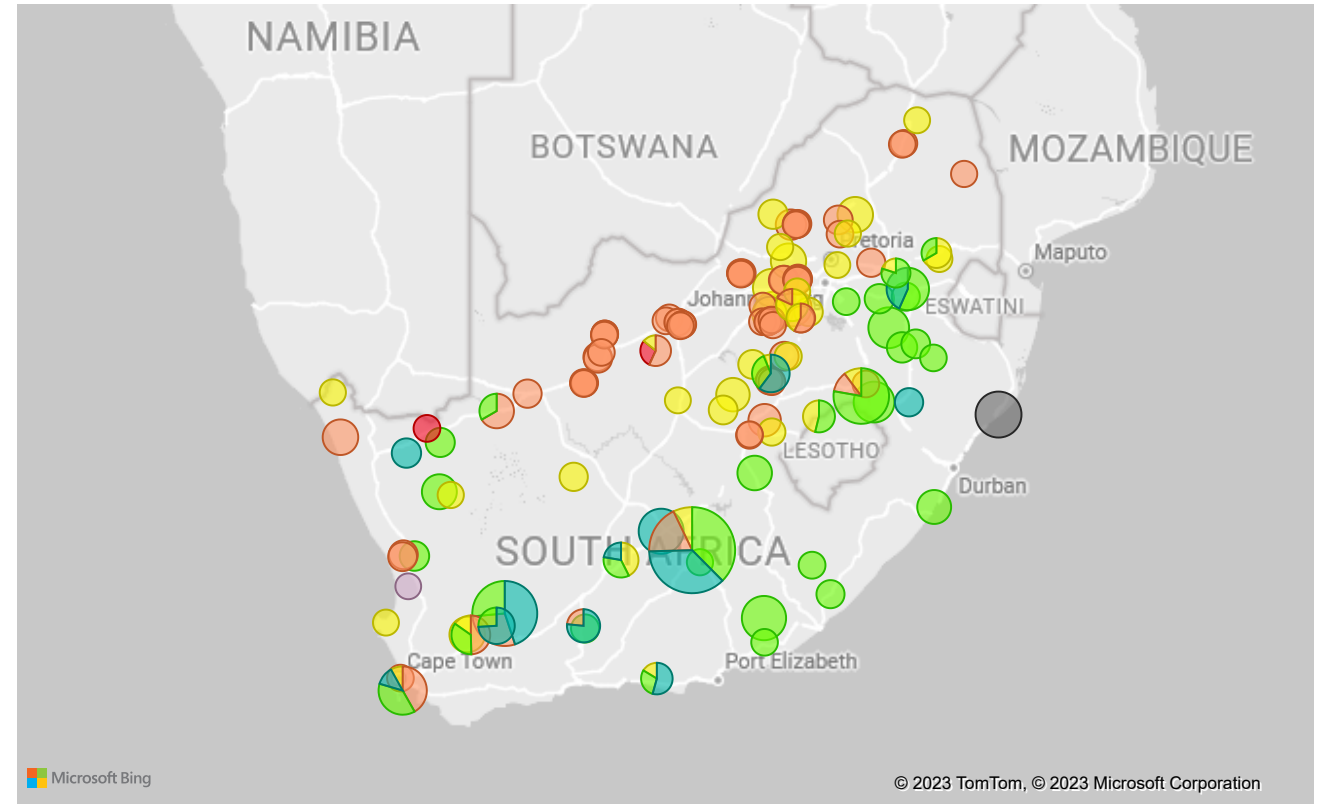
- type-a
- type-b
- type-c



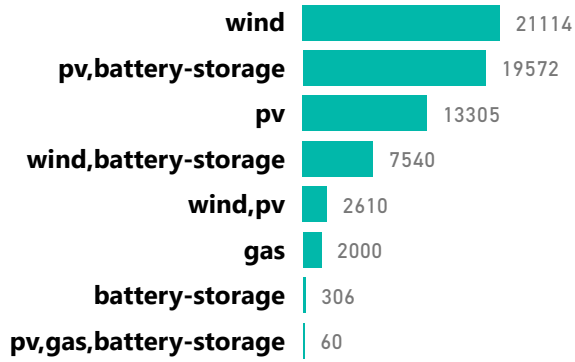
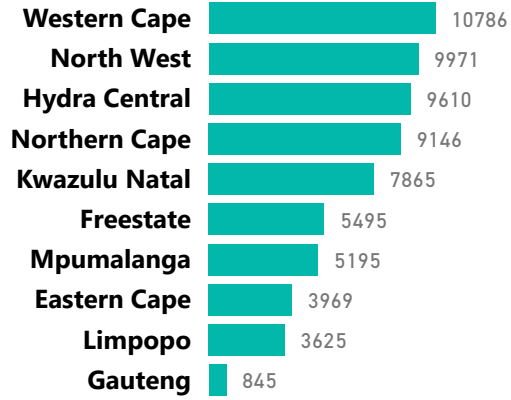
- Eastern C...
- Freestate
- Gauteng
- Hydra C...
- Kwazulu ...
- Limpopo
- Mpumal...



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

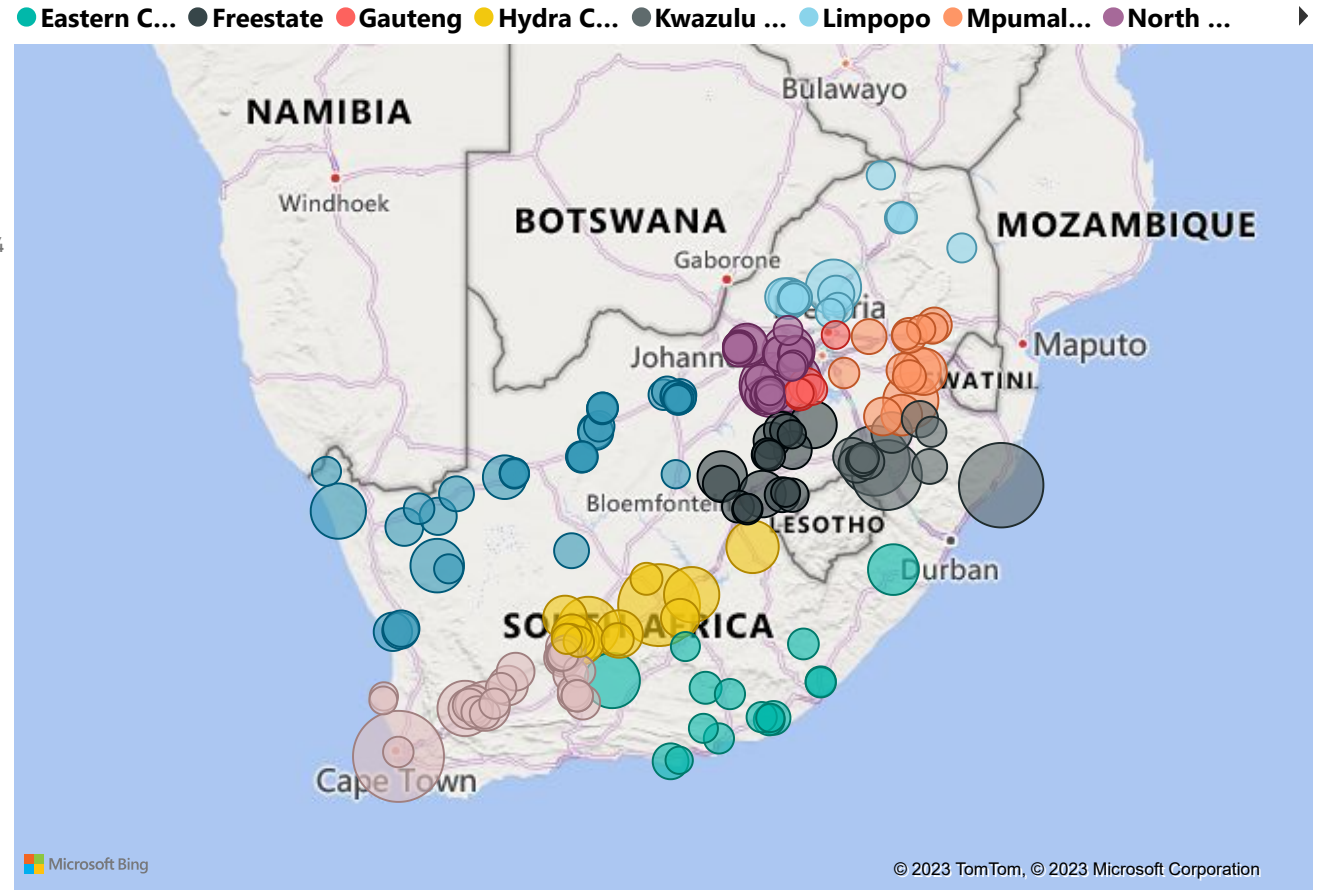


# Grid at Substation

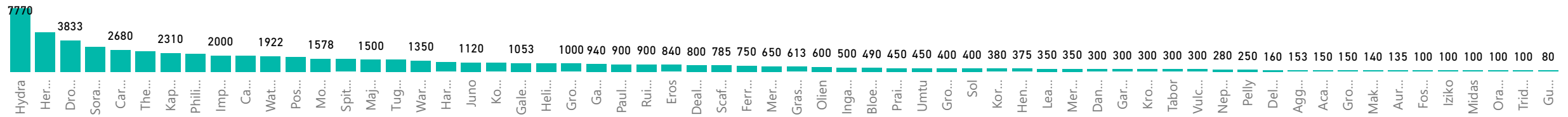


- type-a
- type-b
- type-c

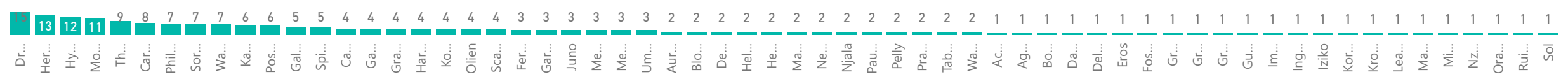
- current-application
- eia-approved
- future-application



Contracted Capacity (MWac) by Substation



Count



The End