

Renewable Installations and Generation - CPCA (2014-2024)

Initial Analysis for Hub Board Discussion

Presented By: Ismail Olatunji
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Purpose, Scope And Definitions

Purpose / key questions

- How are renewable installations distributed across CPCA local authorities (2024)?
- How does CPCA renewable generation compare to the UK (2014–2024)?

Scope

- CPCA local authorities: Cambridge, East Cambridgeshire, Fenland, Huntingdonshire, Peterborough, South Cambridgeshire

Definitions

- Sites / installations: count of renewable electricity installations recorded in the dataset
- Generation: renewable electricity generated (as recorded in dataset)
- Important Note: more sites ≠ more generation (installation size varies)

Approach (Initial Analysis)

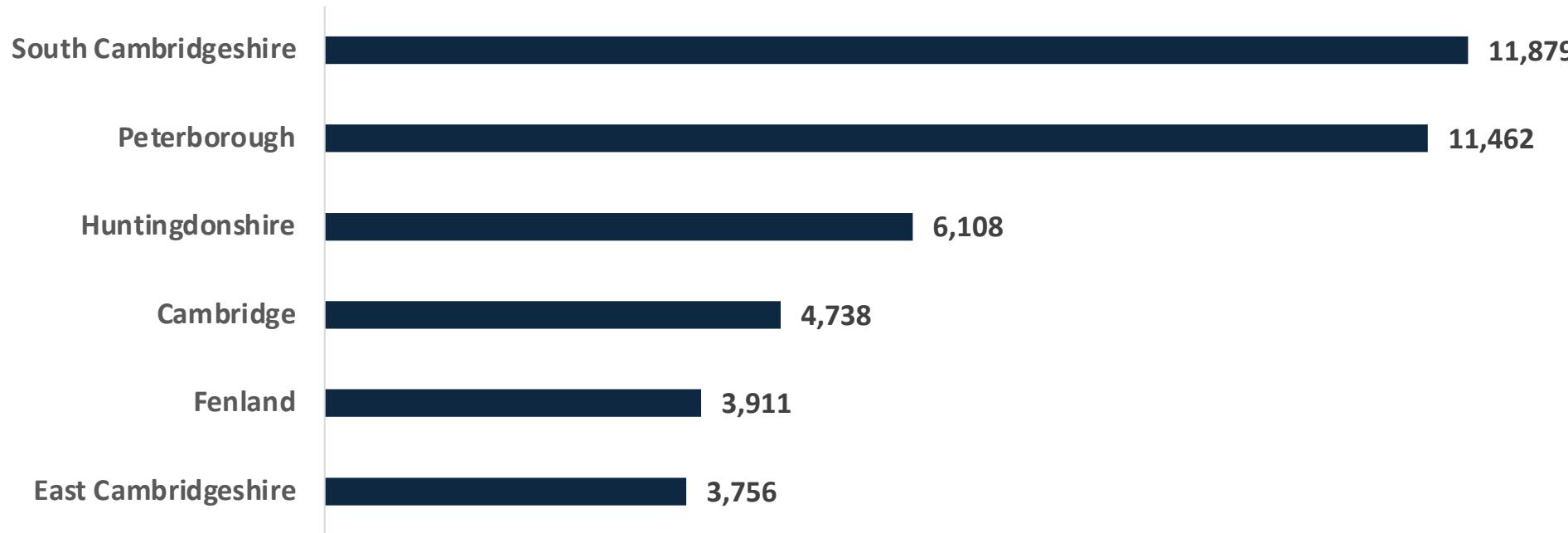
- Imported LA Sites and LA Generation tables (2014-2024)
- Cleaned fields to: Local Authority | Total | Year
- Filtered to CPCA local authorities
- Aggregated totals by year and benchmarked against UK generation

Outputs

- Snapshot (2024): Sites distribution by CPCA local authority
- Trend (2014-2024): Total CPCA sites over time
- Benchmark: CPCA share of UK renewable generation

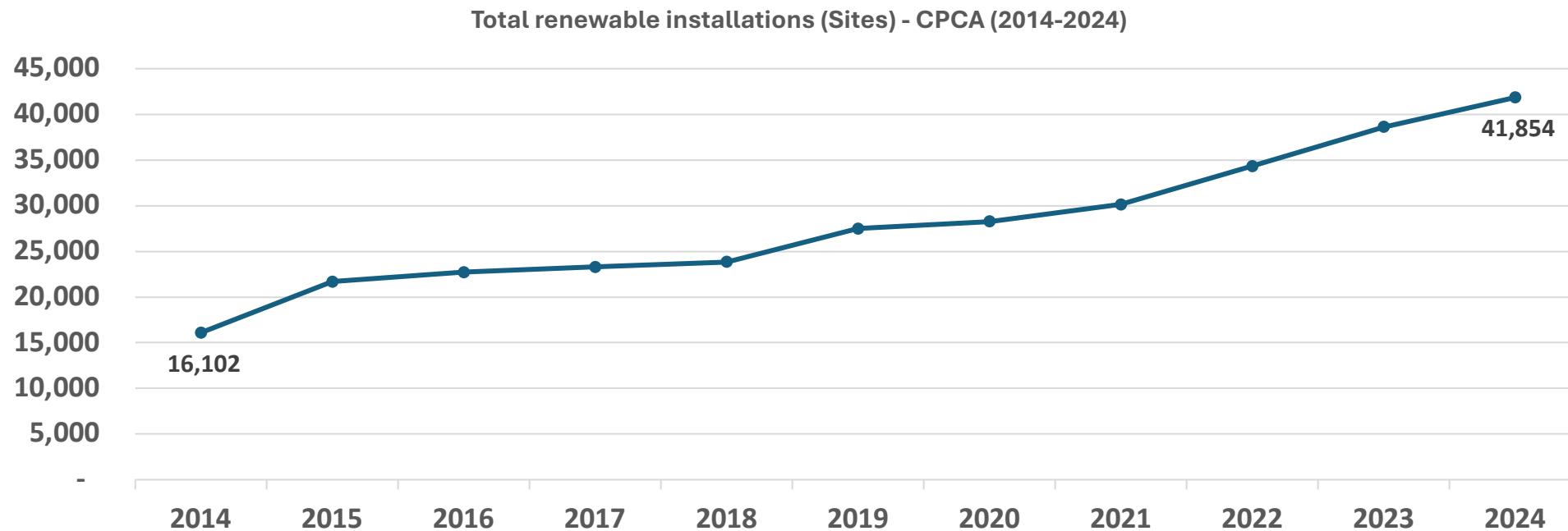
➤ Cambridgeshire County Council is a CPCA constituent authority but not a reporting unit in the DESNZ LA dataset

Renewable Installations (Sites) - CPCA Local Authorities (2024)



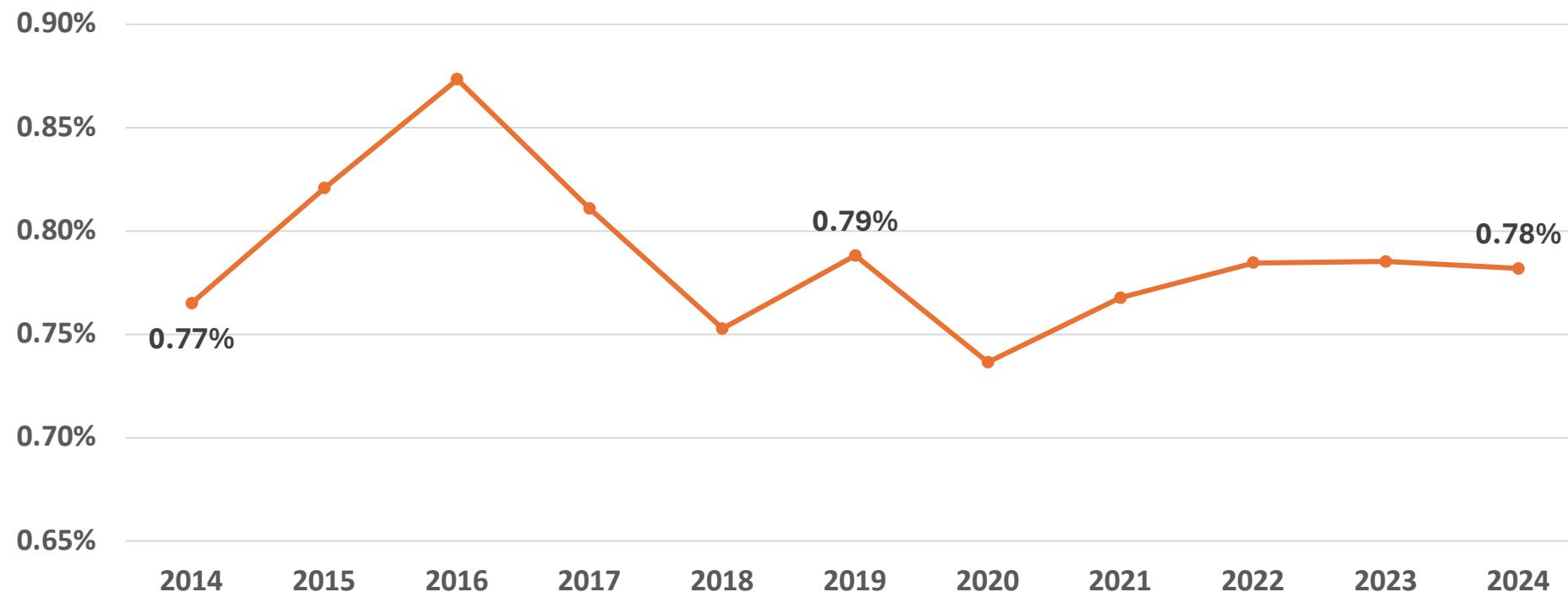
- Installations are concentrated in South Cambridgeshire (11,879) and Peterborough (11,462)
- Huntingdonshire (6,108) is mid-range, while Cambridge, Fenland and East Cambridgeshire are lower
- This indicates an uneven distribution of installations across CPCA

Growth in Renewable Installations (Sites) - CPCa (2014-2024)



- Total installations increased from 16,102 (2014) to 41,854 (2024)
- This is ~2.6x growth in renewable installation count across CPCa
- Growth is strongest from 2019 onwards, indicating accelerated deployment

CPCA Share Of UK Renewable Electricity Generation (2014-2024)



- CPCA contributes ~0.75%–0.87% of UK renewable electricity generation (2014–2024)
- CPCA's share is broadly stable at ~0.8% over time
- In 2024, CPCA generated 1,754,992 vs UK 224,497,189 (0.78% share)

Next Steps: Improvements, Questions & Support

Next steps (extend to whole Hub)

- Confirm Hub scope and client authorities (MSAs + constituent local authorities)
- Build a consistent Hub-wide benchmark: Sites, Generation, Share, Growth
- Identify outliers and target areas for deeper investigation / intervention

Improvements

- Add capacity (MW) and technology mix to explain generation drivers
- Normalise outputs (per household / per km²) to support fair comparisons
- Add constraints context (grid capacity, planning, land/environmental constraints)

Questions for the Hub Board

- What decisions should this analysis support (investment prioritisation, strategy, reporting)?
- Should we focus on operational assets only or include pipeline projects?
- What reporting format is needed for monthly/quarterly DESNZ reporting?

Support needed

- Access to internal datasets: pipeline projects, constraints, targets
- Agreed definitions + QA checks for consistent reporting across authorities
- A central repository/signposting approach for repeatable Hub reporting

Appendix A

Table 1: Sites by CPCa local authority (2024)

Local Authority	Sites	Year
South Cambridgeshire	11,879	2024
Peterborough	11,462	2024
Huntingdonshire	6,108	2024
Cambridge	4,738	2024
Fenland	3,911	2024
East Cambridgeshire	3,756	2024

Table 2: Total CPCa Sites (2014-2024)

Year	CPCA Sites
2014	16,102
2015	21,681
2016	22,722
2017	23,284
2018	23,852
2019	27,496
2020	28,255
2021	30,146
2022	34,329
2023	38,620
2024	41,854

Year	CPCA Generation	UK Generation	CPCA Share
2014	960,953	125,605,139	0.77%
2015	1,333,167	162,454,505	0.82%
2016	1,364,360	156,231,372	0.87%
2017	1,509,875	186,230,346	0.81%
2018	1,529,371	203,186,390	0.75%
2019	1,523,999	193,390,493	0.79%
2020	1,666,054	226,216,724	0.74%
2021	1,492,609	194,431,271	0.77%
2022	1,690,907	215,515,358	0.78%
2023	1,693,127	215,616,373	0.79%
2024	1,754,992	224,497,189	0.78%

Table 3: CPCa vs UK generation + CPCa share (2014–2024)

Appendix B

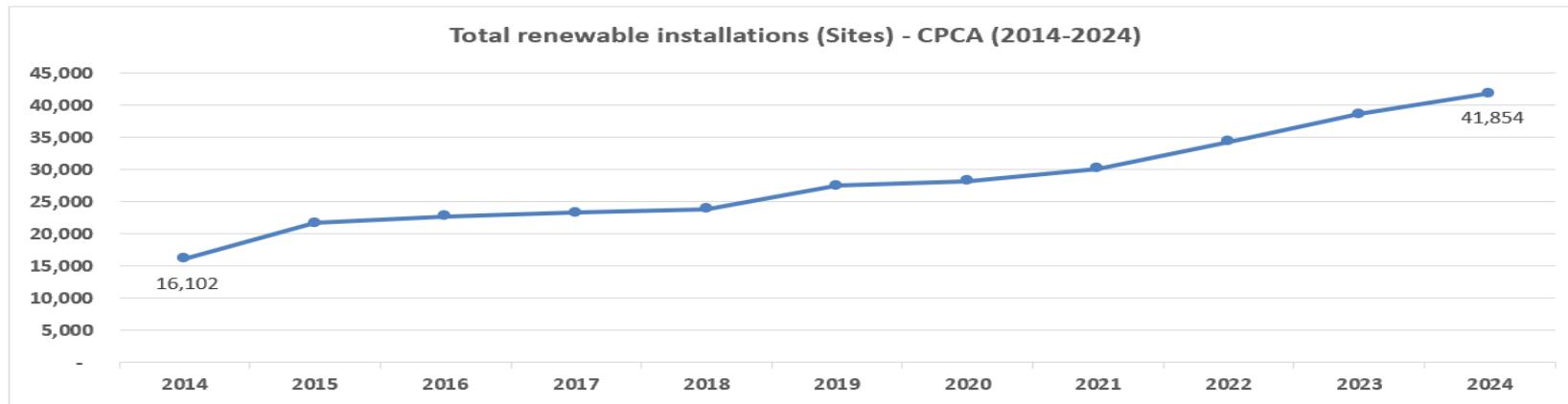
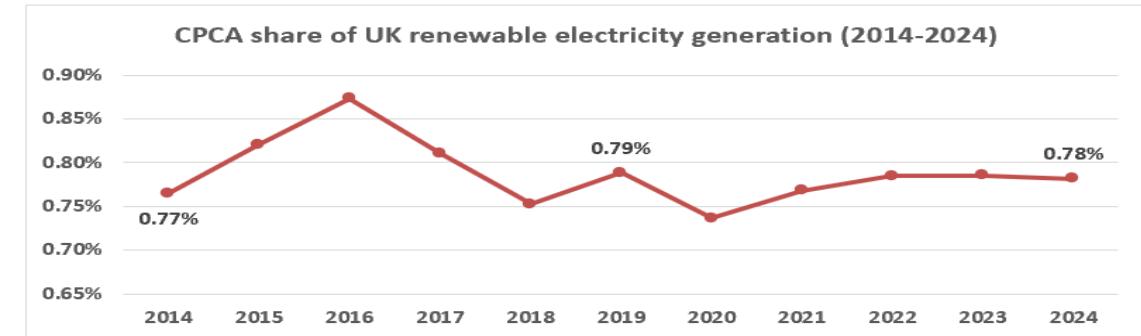
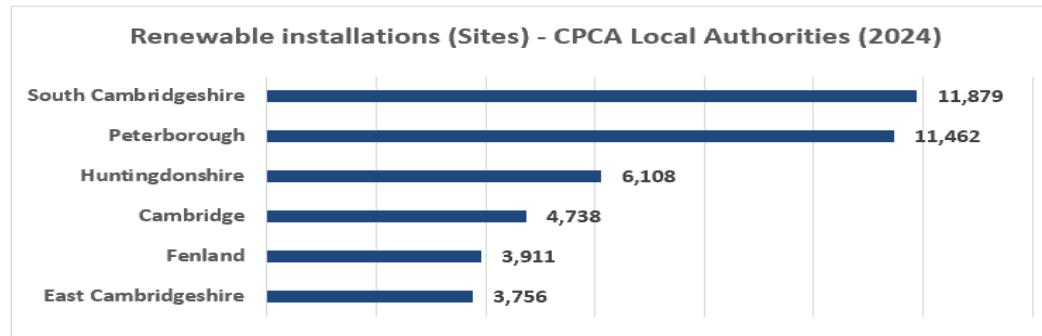
CPCA Renewable Installations & Generation (2014-2024)

Total installations (Sites), 2024
41,854

Total installations (Sites), 2014
16,102

Sites Growth (2014-2024)
159.93%

CPCA share of UK generation, 2024
0.78%
(renewable electricity generation)



Source: DESNZ Regional Renewable Statistics (GOV.UK), 2014-2024