Rainfall and Generation Data for Broompower

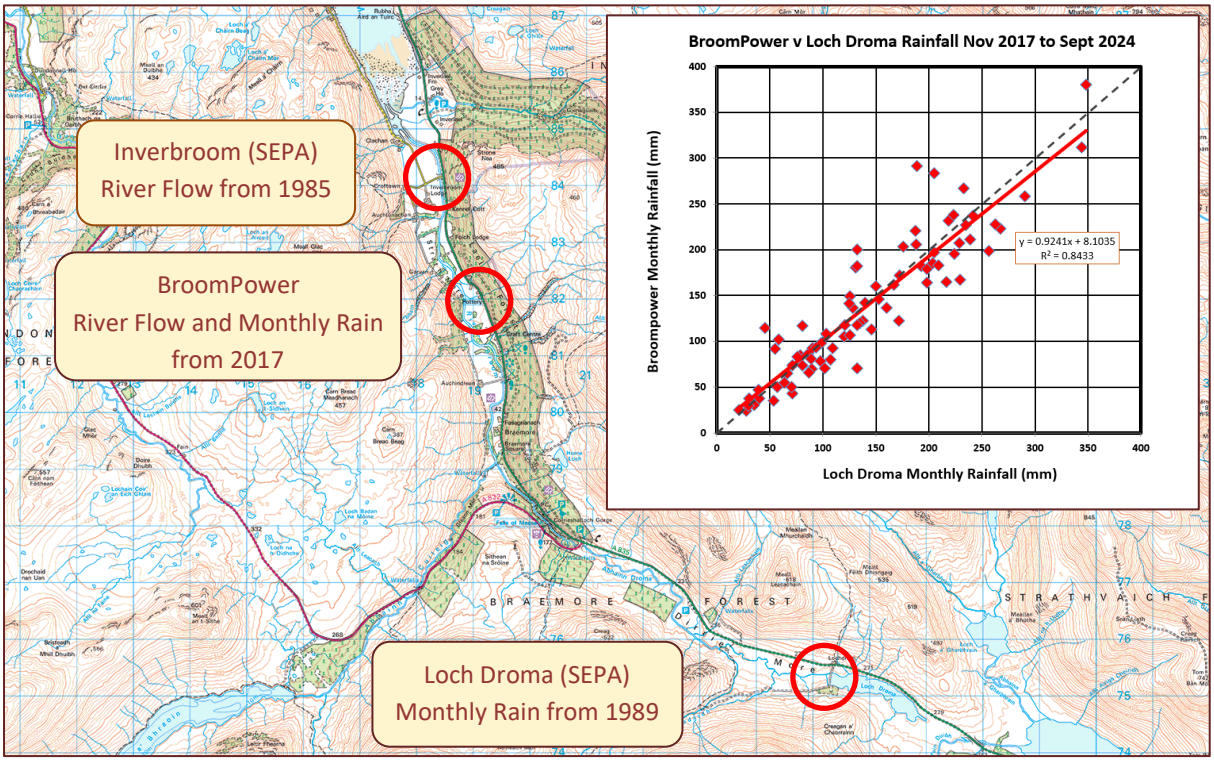
From Start of operation to 20th September 2025

Paul Copestake

21st September 2025

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1 Annual Rainfall Data – Comparison Broompower Rainfall against Rainfall data from Loch Droma (SEPA rain gauge operated since 1989)
2 Broompower – Monthly and annual summary for each year of operation.
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4 BroomPower Performance
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Rainfall Data

The Energy generated by Broompower is directly linked to the flow in the river. This in turn is driven by our climate with monthly and yearly weather showing seasonal and year on year variation. In determining the performance for Broompower it is useful to know if the weather experienced is wet or dry compared to long-term records and furthermore, can any climate change trends be identified.

Direct comparison of river flows between sites is complex, fortunately as rainfall is a key component of the hydrological flow characteristics this information can also be derived using rainfall records. The graph compares the monthly rainfall a Broompower compared against the monthly rainfall at Loch Droma. There is scatter but a regression shows a good fit. It is also close to the dotted line where the two sites have identical rainfall characteristics.

The maps from the Met Office show the annual rainfall from 2018 and the quarterly seasonal data for 2024-25.

The yearly graphs and tables, show the rainfall for Broompower and Loch Droma against long-term averages and ranks the results using the 34 years for Loch Droma. 1 indicates the wettest month, 34 the driest. June 2023 was the 3rd wettest recorded, November 2023 and May 2024 the 5th driest.

Brief Overview of the years weather (2024-25)

Met Office Climate summaries present an overview of weather with monthly and seasonal summaries.
https://www.metoffice.gov.uk/research/climate/maps-and-data/summaries/index

National Hydrological Monitoring Programme (NHMP) produces the monthly Hydrological Summary of the UK. This regular report describes the hydrological conditions during the preceding month:
https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk

SUMMER 2024 (June, July, August)

After a very dry May, the summer was wetter than normal: June, typically a dry month, was the wettest recorded since Broompower became operational; from mid-July to mid-August, it was mostly dry but either side it was very wet. The weather was a result of a southerly Jetstream bringing cold Arctic air to the UK in June and July, while August saw an increase in westerly winds. The south-east of UK in contrast was much drier than the long-term average.

AUTUMN 2024 (Sept, Oct, Nov)

The autumn was much drier than the long-term average, the driest for Scotland since 1993! Fortunately for BroomPower the pattern of rain was kind for hydropower with wet days occurring close enough together to keeps the Allt a Mhuillin 'topped up' and able sustain full generation. First snows in early November resulted in characteristic daytime melting sustaining river flows till rain and milder weather mid-month resulting in a dramatic peak flow of rain combined with snow melt. with snow melt

WINTER 2024-25 (Dec, Jan, Feb)

December was wet, equalling BroomPower's best monthly load factor of 83% last seen in November 2021 (if full generation is achieved continuously the load factor would be 100%). Frontal systems brought heavy rain and coastal gales. Winter rainfall was marginally higher than the long term average.

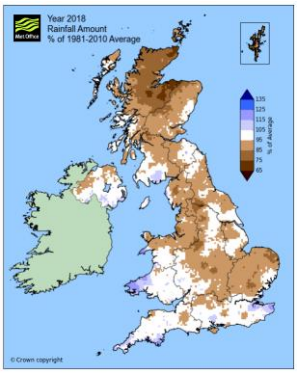
SPRING 2025 (Mar, Apr, May)

Spring 2025 was mainly dry and settled with high pressure dominating for most of the season. It was the warmest and sunniest spring on record for the UK as a whole and the sunniest spring for Scotland. March was marginally below the long-term average for rainfall, April was almost completely dry, and May below half. In April we only generated on two days and in April 5 days.

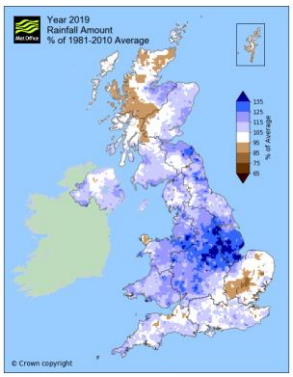
Annual Rainfall for last years

Indicative as these are calendar years – Broom Power operational year is from June to May.

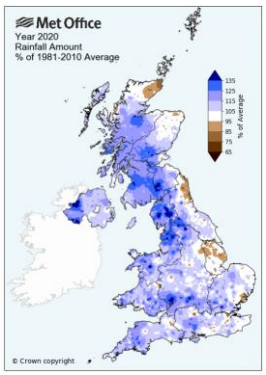
From https://www.metoffice.gov.uk/research/climate/maps-and-data/summaries/index



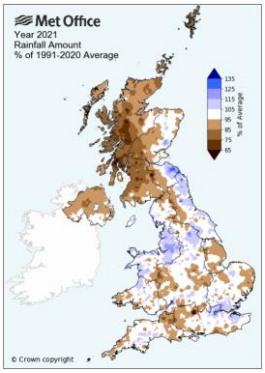
2018



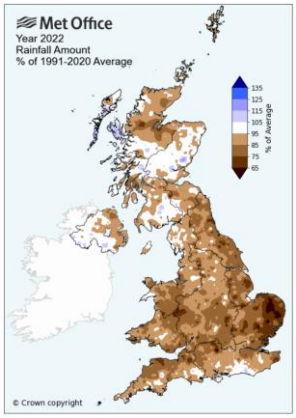
2019



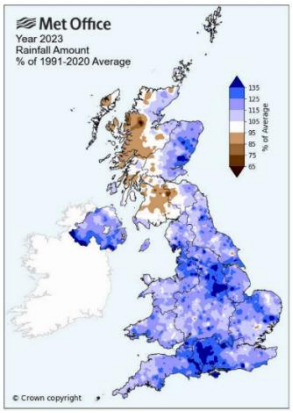
2020



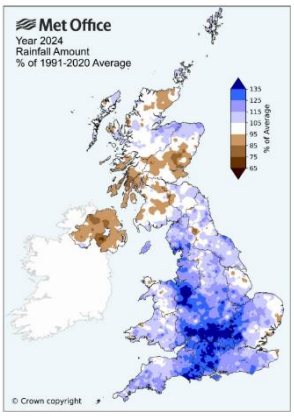
2021



2022



2023

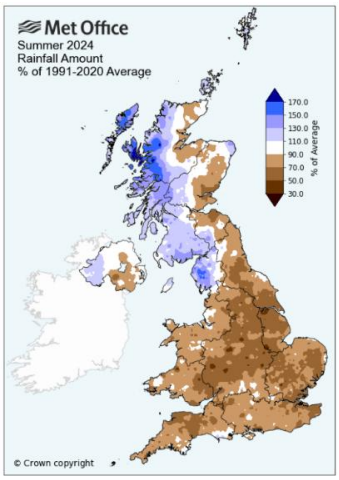


2024

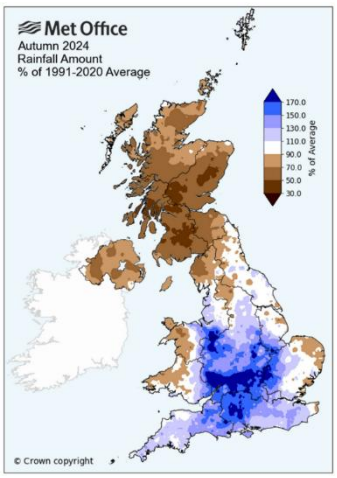
This data shows that since operation Broompower has for the most part experienced drier than average weather, only in 2019-20 was a wetter than normal weather experienced. 2023 was wetter than average for UK with the exception being western Scotland, however immediately around Inverleal, the character was more akin to the weather to the east so the pattern of rainfall bucked the trend; as a result, generation was only just behind 2019-20

Rainfall for 2023-24

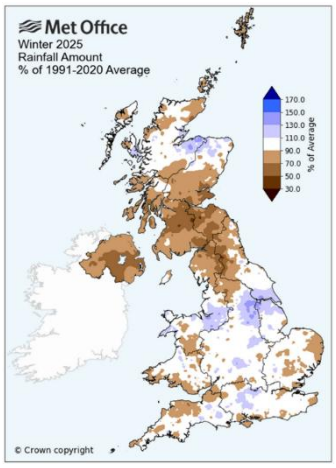
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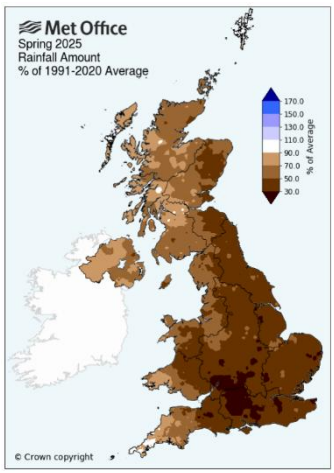
2024 (J, J, A)



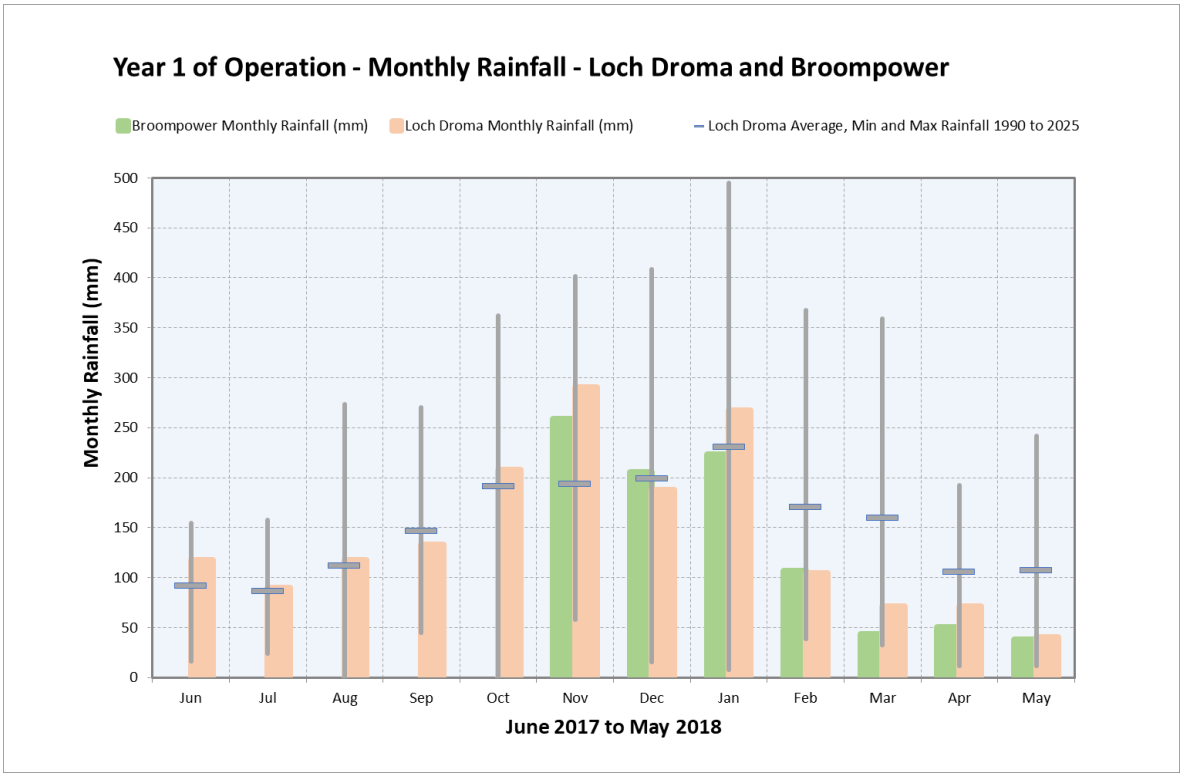
2024 (S, O, N)



2024-5 (D, J, F)

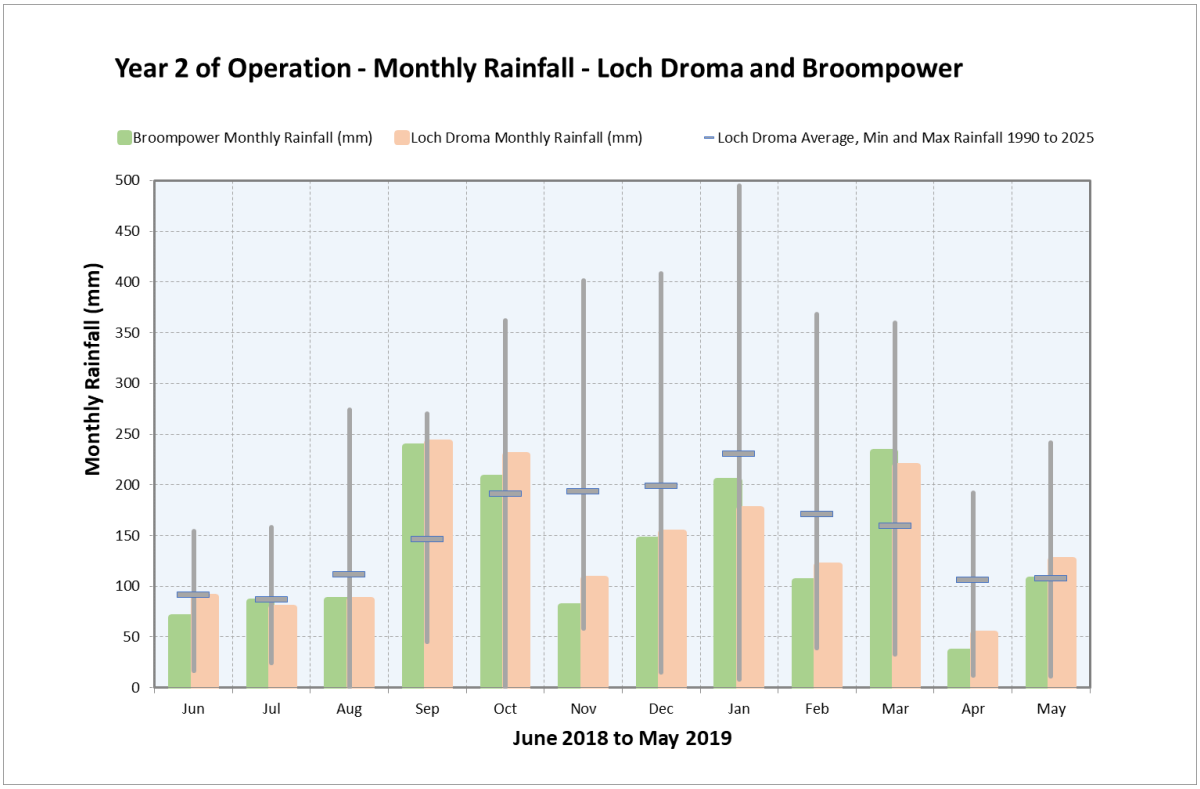


2025 (M, A, M)



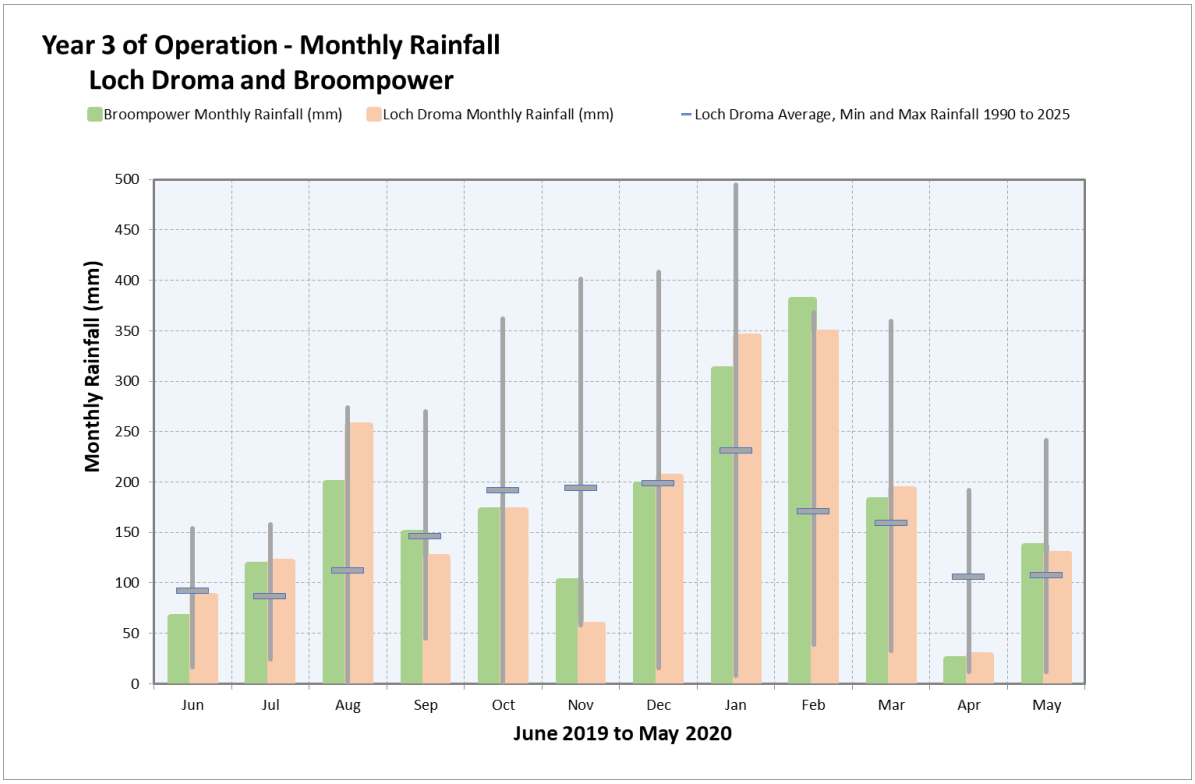
Year 1 - November 2017-2018	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	117.6	89.8	117.8	132.6	207.8	290.2	187.6	267.2	104	71.4	70.8	40.2
Broompower Monthly Rainfall (mm)						258.5	205.5	223	107	43	50	38
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	125	102	101	91	107	150	95	112	60	45	66	37
Droma Monthly Rainfall Rank out of 35						7	20	11	28	30	25	28

2017-2018 (Nov to May)	
Loch Droma Total Rainfall (mm)	1031.4
Broompower Total Rainfall (mm)	925
Loch Droma Average Rainfall 1990 - 2025	903.4
Droma Percentage of LTA	114%
Generation Year Rank (out of 35)	21



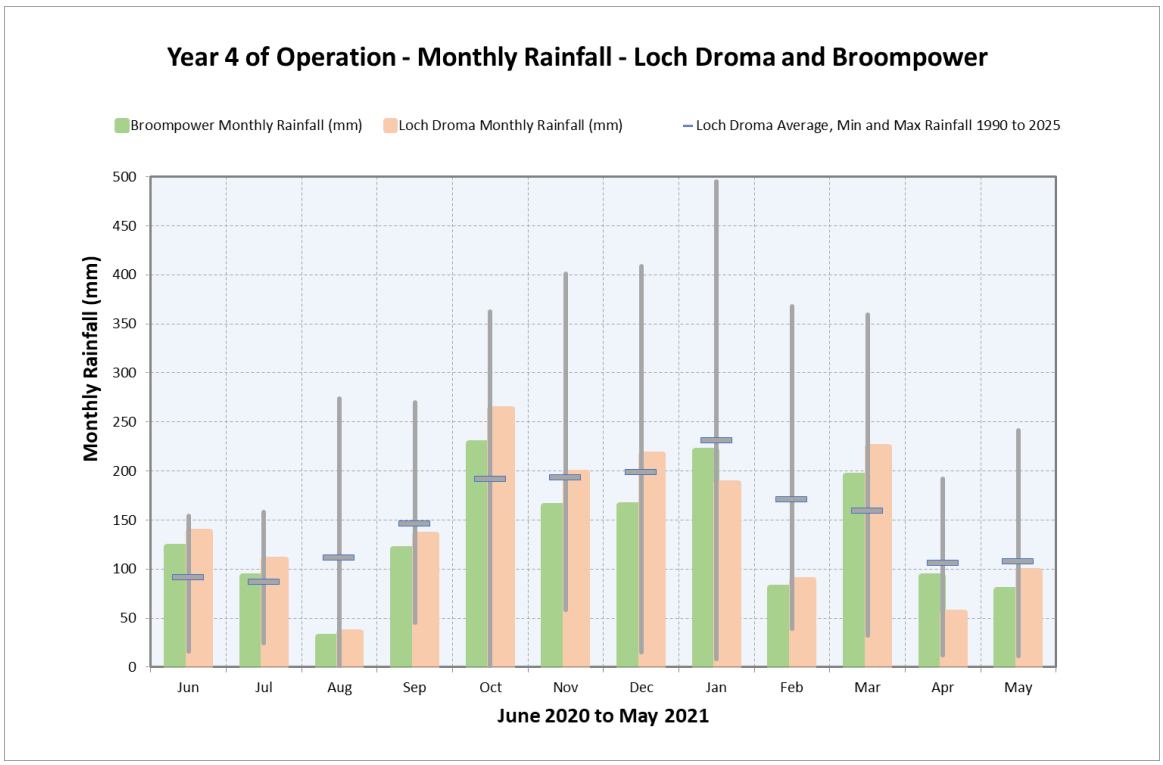
Year 2 - 2018-2019	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	89.4	78.8	86.2	241.4	228.8	107.4	152.8	176	120	218.2	53.2	125.4
Broompower Monthly Rainfall (mm)	69.5	84.5	86.5	237.5	207	80	146	203.5	105	232	35	106.6
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	95	89	74	165	117	55	77	74	69	139	50	117
Droma Monthly Rainfall Rank out of 35	18	20	20	4	11	28	22	23	21	8	32	11

2018-2019	
Loch Droma Total Rainfall (mm)	1677.6
Broompower Total Rainfall (mm)	1593.1
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	93%
Generation Year Rank (out of 35)	22



Year 3 - 2019-2020	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	87	121	256.2	125.2	172	58.4	205	344	348	193	28	128.4
Broompower Monthly Rainfall (mm)	65.6	117.4	198.8	149.2	172	101.8	197.4	311.6	380.2	182.2	24.6	136.6
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	93	137	219	86	88	30	103	144	201	123	26	119
Droma Monthly Rainfall Rank out of 35	20	7	2	21	23	34	15	4	2	9	33	10

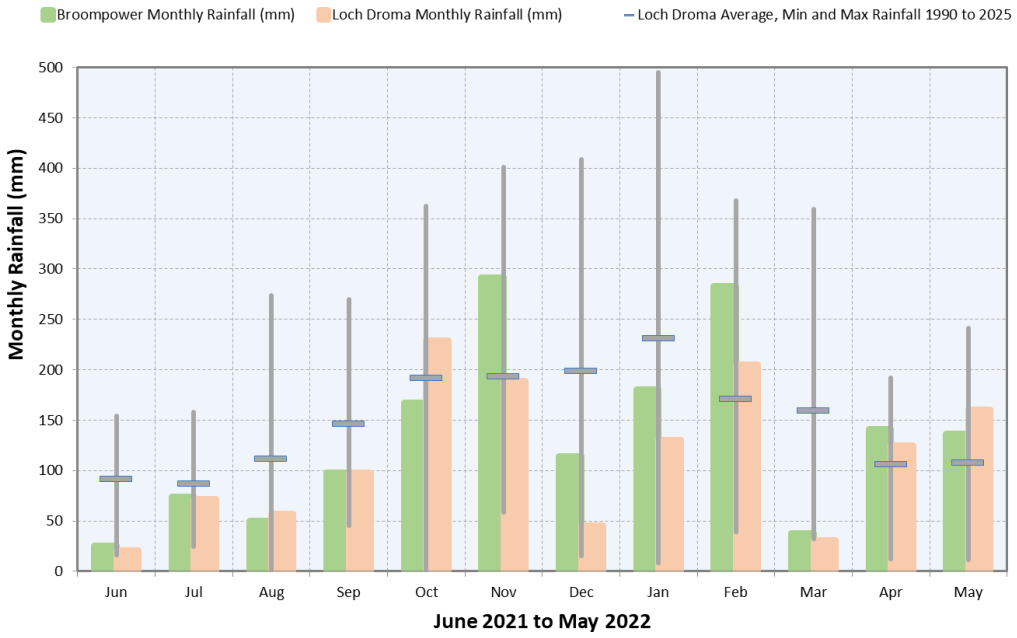
2019-2020	
Loch Droma Total Rainfall (mm)	2066.2
Broompower Total Rainfall (mm)	2037.4
Loch Droma Average Rainfall 1990 - 2025	1,799
Droma Percentage of LTA	115%
Generation Year Rank (out of 35)	7



Year 4 - 2020-2021	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	138	109.2	35	135	262.8	197.8	216.4	187	88.6	224	55.2	97.6
Broompower Monthly Rainfall (mm)	122.8	92.6	30.4	120	228	164	165	220.8	80.8	195.4	92.2	78.2
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	153	122	31	92	132	102	112	81	52	142	52	92
Droma Monthly Rainfall Rank out of 35	2	9	33	17	6	17	13	21	29	6	29	19

2020-2021	
Loch Droma Total Rainfall (mm)	1746.6
Broompower Total Rainfall (mm)	1590.2
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	97%
Generation Year Rank (out of 35)	17

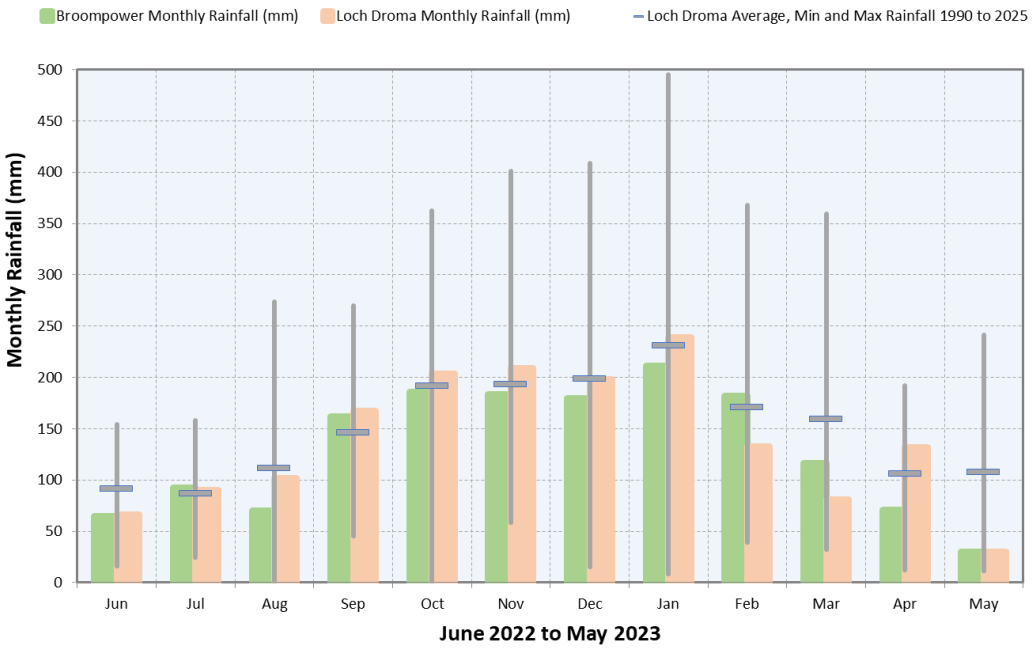
Year 5 of Operation - Monthly Rainfall - Loch Droma and Broompower



Year 5 - 2021-2022	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	21	71.4	57.2	98.2	229.2	188.6	45.4	130.6	204.8	30.6	124.8	160.2
Broompower Monthly Rainfall (mm)	25.2	74	50	97.8	167.2	291.4	114.4	180.4	283.2	37.6	141	136.6
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	23	80	50	67	115	97	23	57	120	19	119	150
Droma Monthly Rainfall Rank out of 35	33	26	30	26	10	19	31	27	11	15	11	6

2021-2022	
Loch Droma Total Rainfall (mm)	1362
Broompower Total Rainfall (mm)	1598.8
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	76%
Generation Year Rank (out of 35)	29

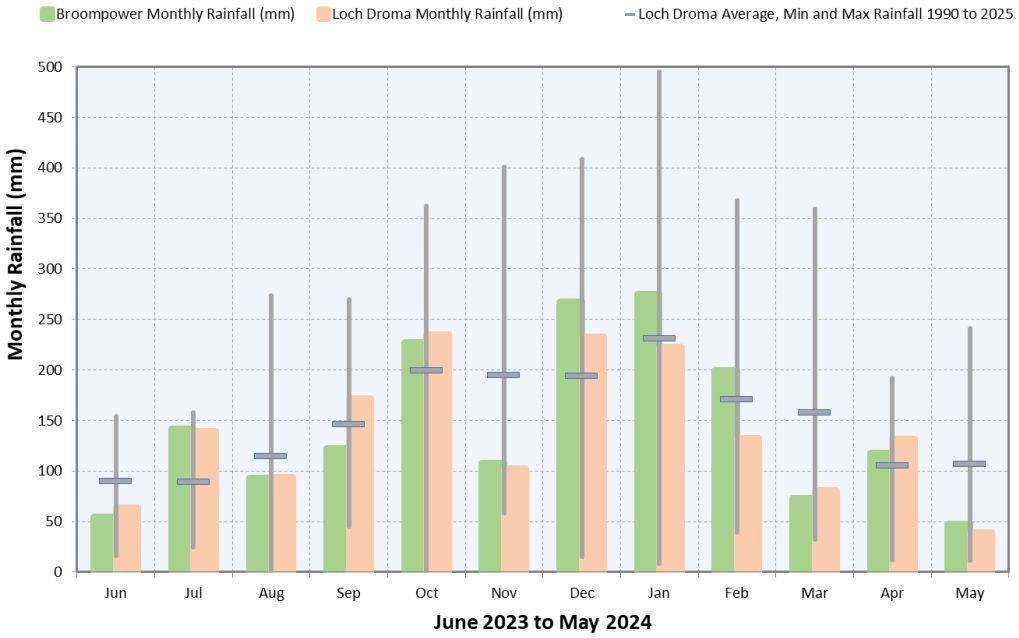
Year 6 of Operation - Monthly Rainfall - Loch Droma and Broompower



Year 6 - 2022-2023	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	66.2	90	101.6	167.2	203.4	209	198.3	239.1	132.6	80.8	132	29.8
Broompower Monthly Rainfall (mm)	65	92.6	70.4	161.8	185.4	183.2	179.4	211.4	182.2	116.6	70.8	29.6
Loch Droma Averages (Jun- May) 1990 to 2025	90.8	87.6	114.8	144.8	198.1	196.8	194.1	234.2	171.5	159.3	106.4	108.8
Droma Rainfall as Percentage of LTA	73	103	88	115	103	106	102	102	77	51	124	27
Droma Monthly Rainfall Rank out of 35	25	15	17	14	14	15	17	30	17	24	26	32

2022-2023	
Loch Droma Total Rainfall (mm)	1650
Broompower Total Rainfall (mm)	1548.4
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	92%
Generation Year Rank (out of 35)	27

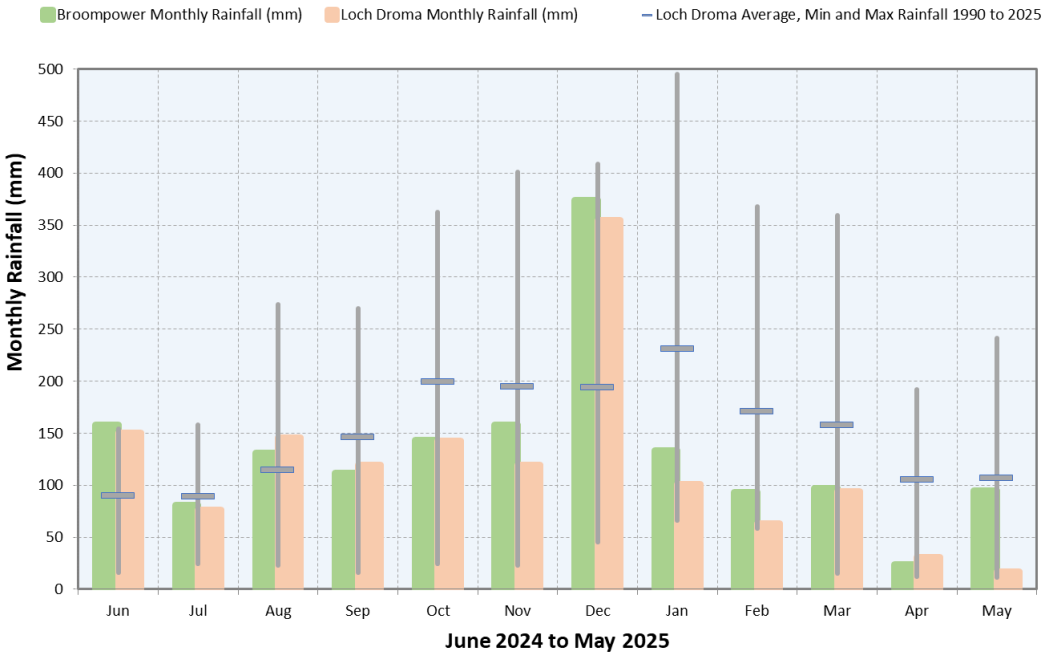
Year 7 of Operation - Monthly Rainfall - Loch Droma and Broompower



Year 7 - 2023-2024	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	64	139.8	93.6	171.6	234.8	102.8	192.6	223	132.6	80.8	132	39.6
Broompower Monthly Rainfall (mm)	54.6	68.6	93	122.8	227.2	129.6	267.2	237.6	200	73.4	118	47.4
Loch Droma Averages (Jun- May) 1990 to 2025	90.8	87.6	114.8	144.8	198.1	196.8	194.1	234.2	171.5	159.3	106.4	108.8
Droma Rainfall as Percentage of LTA	71	160	82	119	119	52	99	95	77	51	124	36
Droma Monthly Rainfall Rank out of 35	27	3	18	12	9	29	19	19	19	28	9	29

2023-2024	
Loch Droma Total Rainfall (mm)	1607.2
Broompower Total Rainfall (mm)	1639.4
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	89%
Generation Year Rank (out of 35)	24

Year 8 of Operation - Monthly Rainfall - Loch Droma and Broompower



Year 8 - 2024-2025	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Loch Droma Monthly Rainfall (mm)	150	76.2	145.8	119.8	142.8	119.6	354.6	100.6	63.2	93.8	30.4	17
Broompower Monthly Rainfall (mm)	158	80.5	131	112	143	158	374	133.5	93.5	97	24	95
Loch Droma Averages (Jun- May) 1990 to 2025	90.0	89.2	114.2	146.1	199.5	194.5	194.1	231.0	170.9	157.9	105.3	106.5
Droma Rainfall as Percentage of LTA	167	85	128	82	72	61	183	44	37	59	29	16
Droma Monthly Rainfall Rank out of 35	2	24	9	22	29	27	5	31	33	28	33	34

2024-2025	
Loch Droma Total Rainfall (mm)	1413.8
Broompower Total Rainfall (mm)	1599.5
Loch Droma Average Rainfall 1990 - 2025	1799
Droma Percentage of LTA	79%
Generation Year Rank (out of 35)	32

BroomPower Performance

Each Page below summarises the operational performance for each year. When set up, the financial year was established from June to May. Fortunately, this fits in with Hydrological seasons, June, July and August = Summer; September, October and November = Autumn; December, January and February = Winter; March, April and May = Spring.

The Graph and tables refer to load factor, BroomPower's turbine capacity is 100kW, a threshold set to maximise the feed in tariff available at the time.

Monthly performance can be gauged by looking at the 'Load factor". If BroomPower generates 100kW all the time the load factor would be 100%.

As a "Run of River hydro scheme, the flow to the turbine is dependent on what is available in the river, there is no storage. When the river is low all the river flow bypasses the pipe to the turbine (penstock) to keep the river downstream of the intake ecologically happy. Above this "compensation flow" water flows to the turbine, Generation relates directly to flow in the penstock, in turn the flow in the river. When there is enough flow to generate 100kW any higher flow spills over the intake weir.

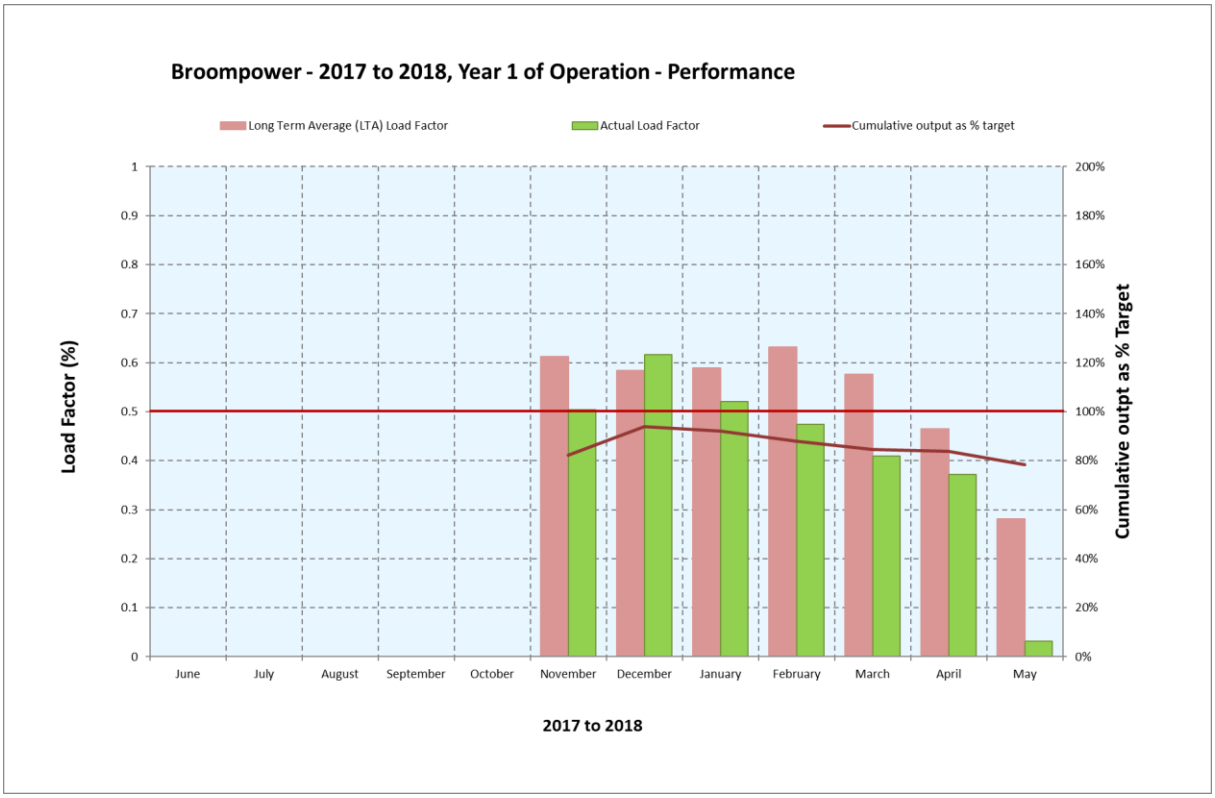
The proportion of the time that BroomPower can generate is a lot less and what is achieved is known as the load factor.

In planning the scheme, a theoretical load factor can be calculated based upon the long-term hydrological characteristics of the river; this is shown in pink. What is actually achieved is shown in green. Variability is a character of UK weather so month by month what is observed will change, the best that can be hoped for is that over time they do.

Load factor as a % of the can be compared to the 'rainfall rank' both month by month and year by year. It takes a wetter than average year for the observed to be close to the target, it looks as if the target set is slightly over estimated: With a few more years of data the target will be revised based on the 10 years or so of observed data.

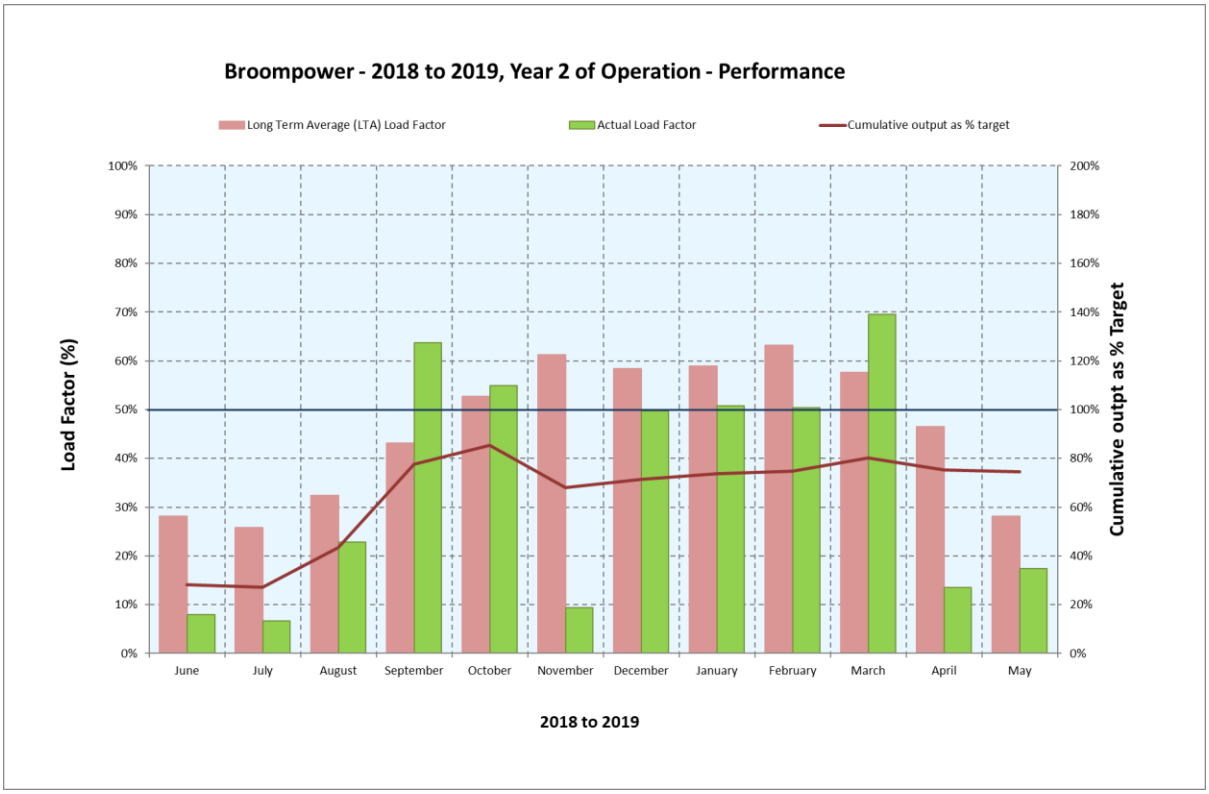
Finally, just being wet is not all that makes for a perfect run of river scheme – the 'goldilocks' dream is steady rainfall keeping the river flow just above the amount required to generate 100kW day after day. Sadly, our site and highland weather is often all or nothing so the river is 'flashy' big spates followed by low flows between frontal depressions.

The final graphs show the river flow and generation month by month, alongside a graph of the daily rainfall.



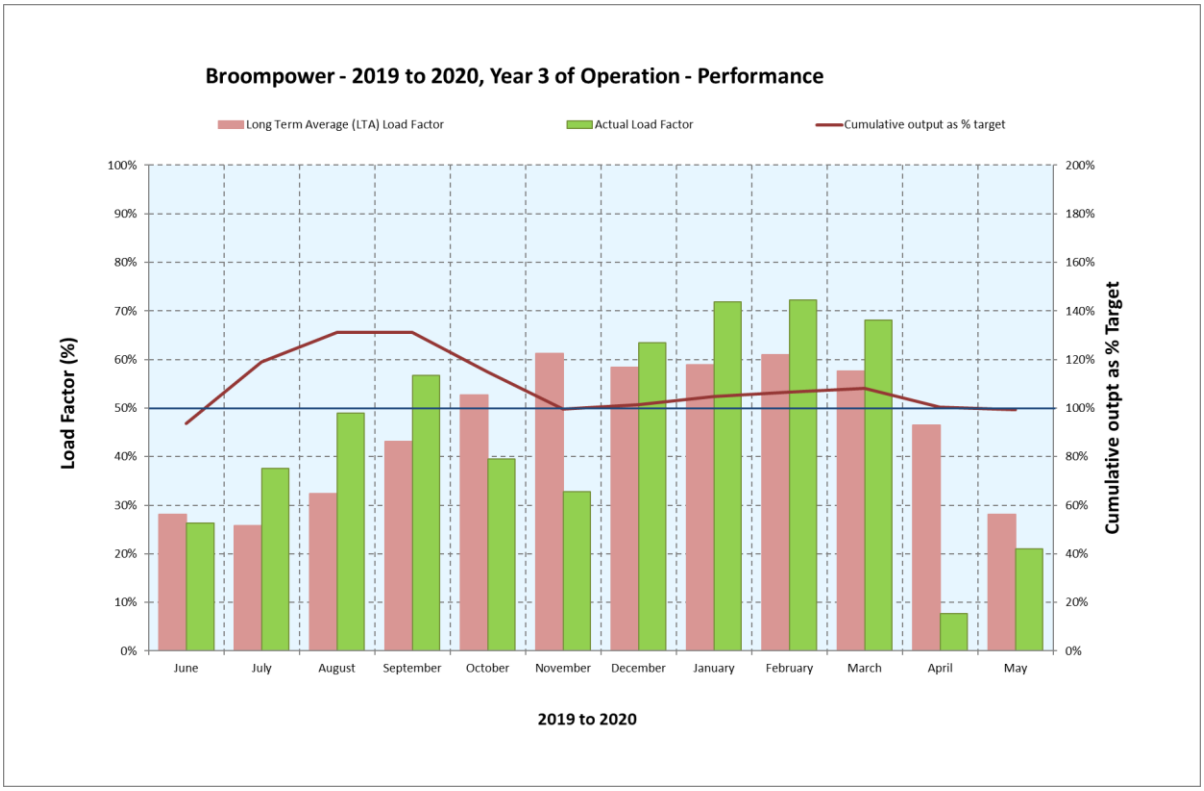
2017-2018	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH						36,260	45,903	38,718	31,892	30,491	26,783	2,366
Monthly target to generate 405000 KWH/Y						44,141	43,411	43,851	42,484	42,864	33,453	20,975
Monthy Income (Gross)						£7,887	£9,984	£8,421	£6,936	£6,632	£5,825	£515
Actual Load as a % of LTA						18%	23%	19%	16%	15%	17%	2%
Cumulative output as % target						82%	94%	92%	88%	85%	84%	78%

2017-2018	Total
Total Generation KWH	212,413
Annual Target 405000 KWH (See Business Plan)	271,179
Annual Income (calculated from output)	£46,200
Actual as percentage target	78%



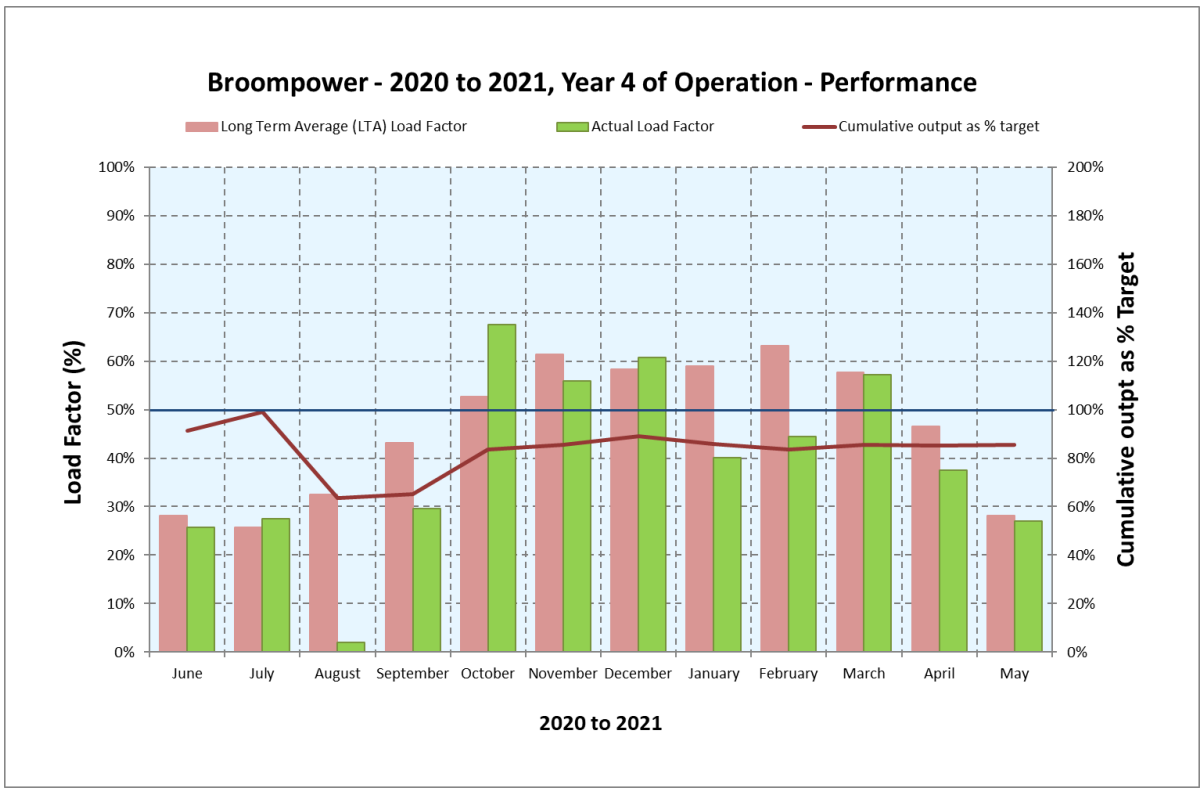
2018-2019	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	5684	4997	16993	45841	40874	6747	36982	37752	33860	51706	9746	12965
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income (Gross)	£1,236	£1,087	£3,696	£9,970	£8,890	£1,467	£8,043	£8,211	£7,365	£11,246	£2,363	£3,143
Actual Load as a % of LTA	28%	26%	70%	148%	104%	15%	85%	86%	80%	121%	29%	62%
Cumulative output as % target	28%	27%	44%	78%	85%	68%	71%	74%	75%	80%	75%	75%

2018-2019	Total
Total Generation KWH	304,147
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£66,717
Actual as percentage target	75%



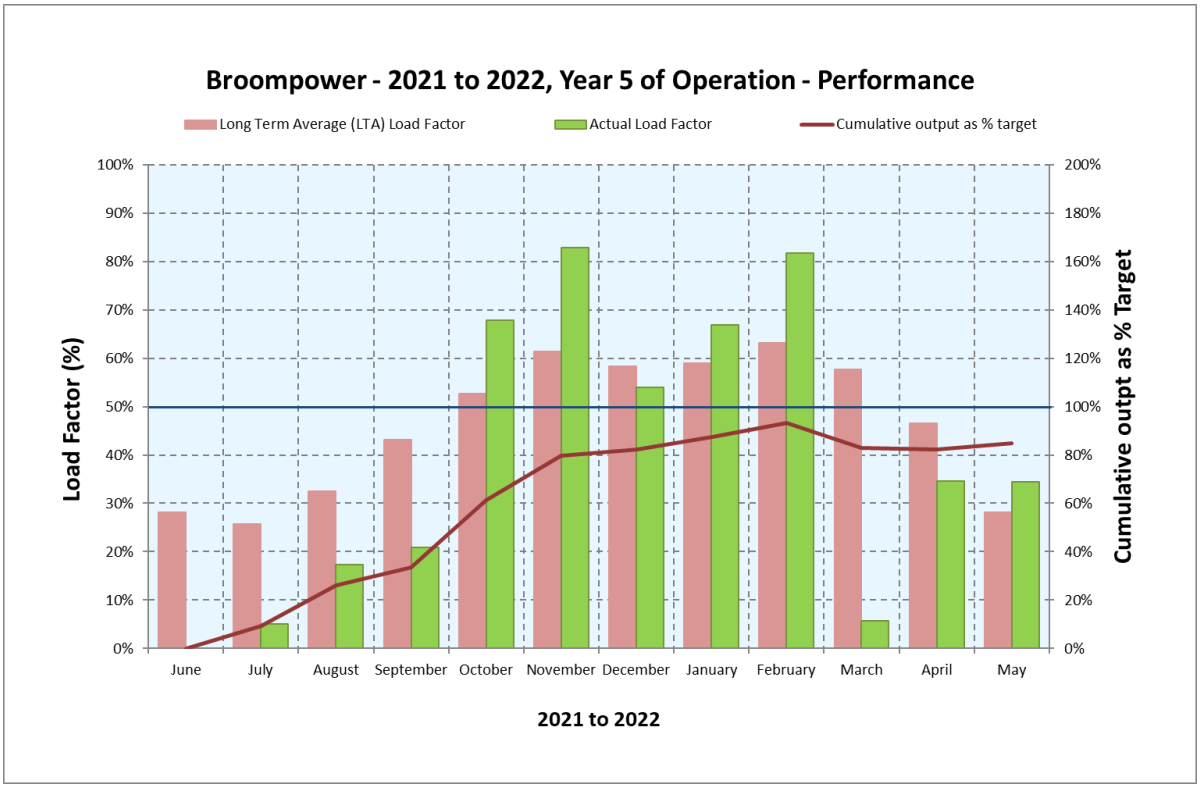
2019-2020	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	18940	27989	36380	40867.8	29383.3	23624.4	47249.7	53483.9	50242.1	50630.1	5559.7	15591.7
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£4,591	£6,785	£8,819	£9,906	£7,123	£5,727	£11,453	£12,964	£12,179	£12,273	£1,294	£3,630
Actual Load as a % of LTA	94%	146%	151%	132%	75%	54%	109%	122%	118%	118%	17%	74%
Cumulative output as % target	94%	119%	131%	131%	115%	100%	101%	105%	107%	108%	100%	99%

2019-2020	Total
Total Generation KWH	399,942
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£96,743
Actual as percentage target	99%



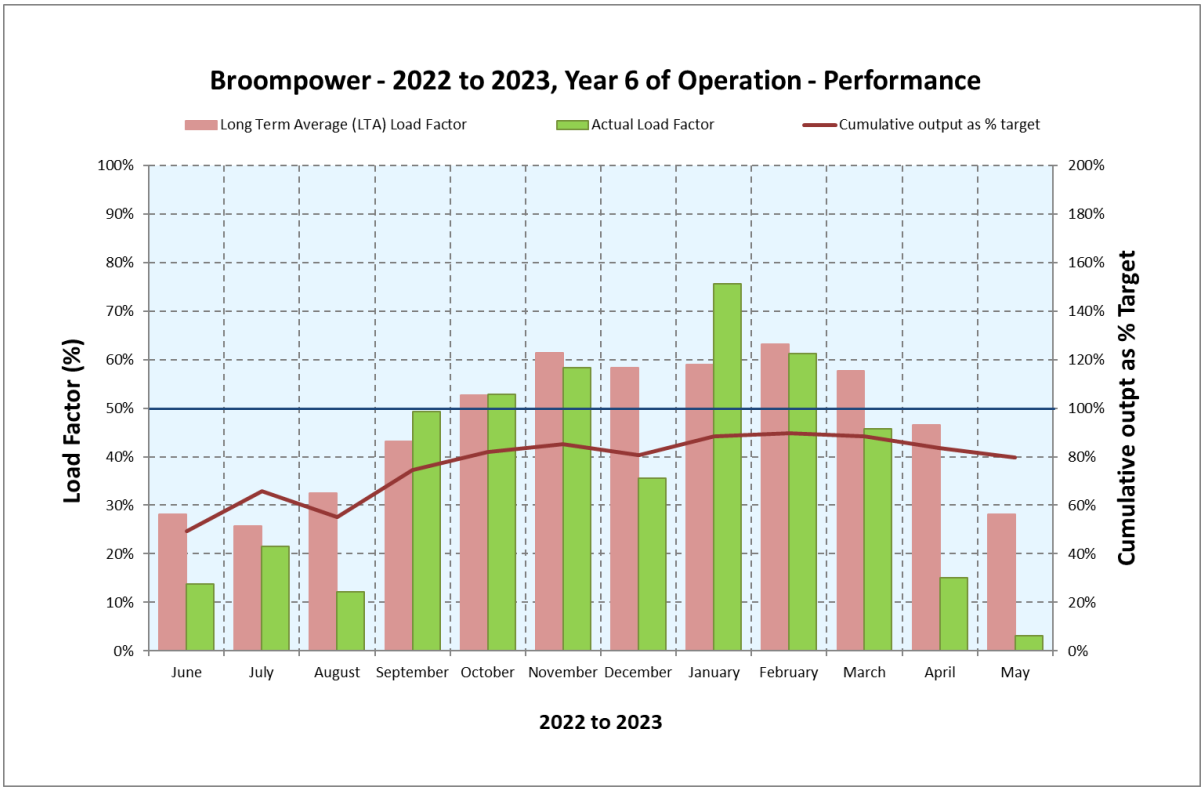
2020-2021	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	18470	20498	1423	21354	50224	40242	45250	29789	29866	42584	26958	20035
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£4,300	£4,772	£331	£4,971	£11,692	£9,368	£10,534	£6,935	£6,953	£10,080	£7,125	£5,295
Actual Load as a % of LTA	91%	107%	6%	69%	128%	91%	104%	68%	70%	99%	81%	96%
Cumulative output as % target	91%	99%	64%	65%	84%	86%	89%	86%	84%	86%	85%	86%

2020-2021	Total
Total Generation KWH	346,693
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£82,356
Actual as percentage target	86%



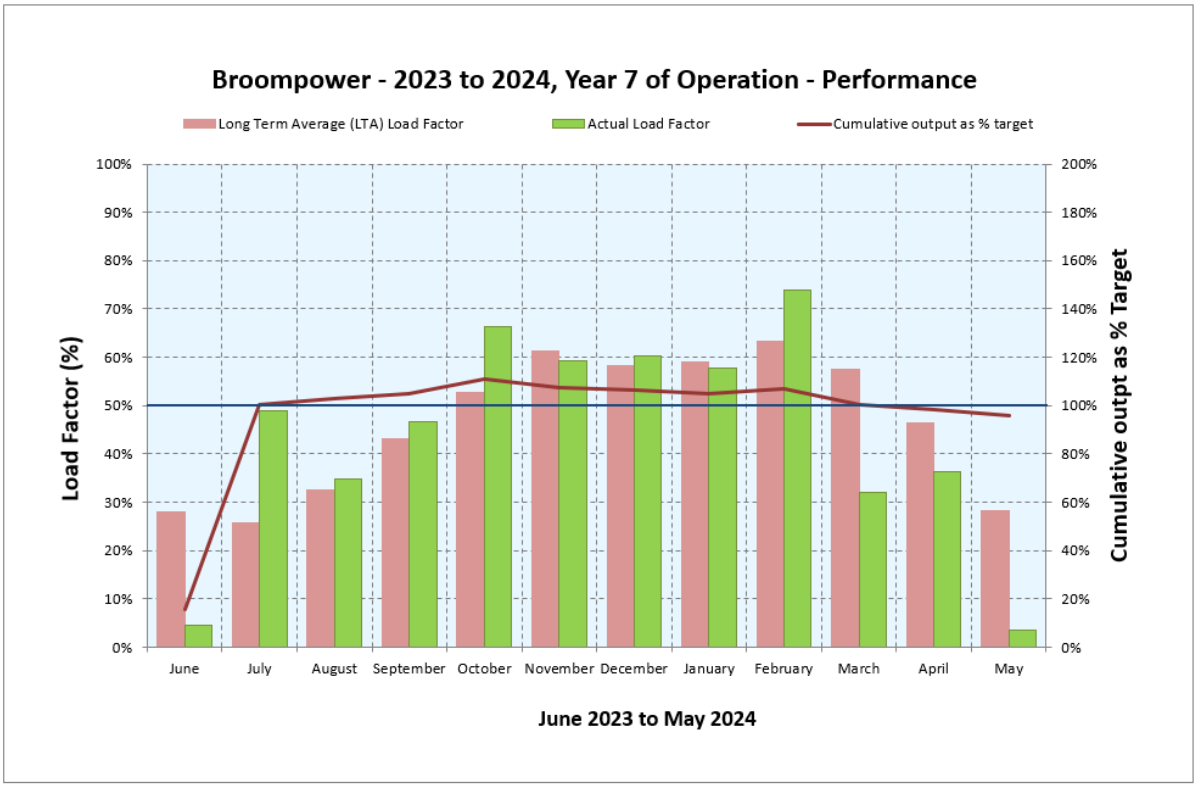
2021-2022	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	0	3722.4	12867	15076.9	50474.7	59598.5	40159	49796.1	54949.8	4213.7	24913.7	25559.1
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£0	£984	£3,401	£3,985	£13,340	£15,751	£10,614	£13,161	£14,523	£1,114	£6,584	£8,844
Actual Load as a % of LTA	0%	19%	53%	49%	129%	135%	93%	114%	129%	10%	74%	122%
Cumulative output as % target	0%	9%	26%	33%	61%	80%	82%	87%	93%	83%	82%	85%

2021-2022	Total
Total Generation KWH	341,331
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£92,299
Actual as percentage target	84%



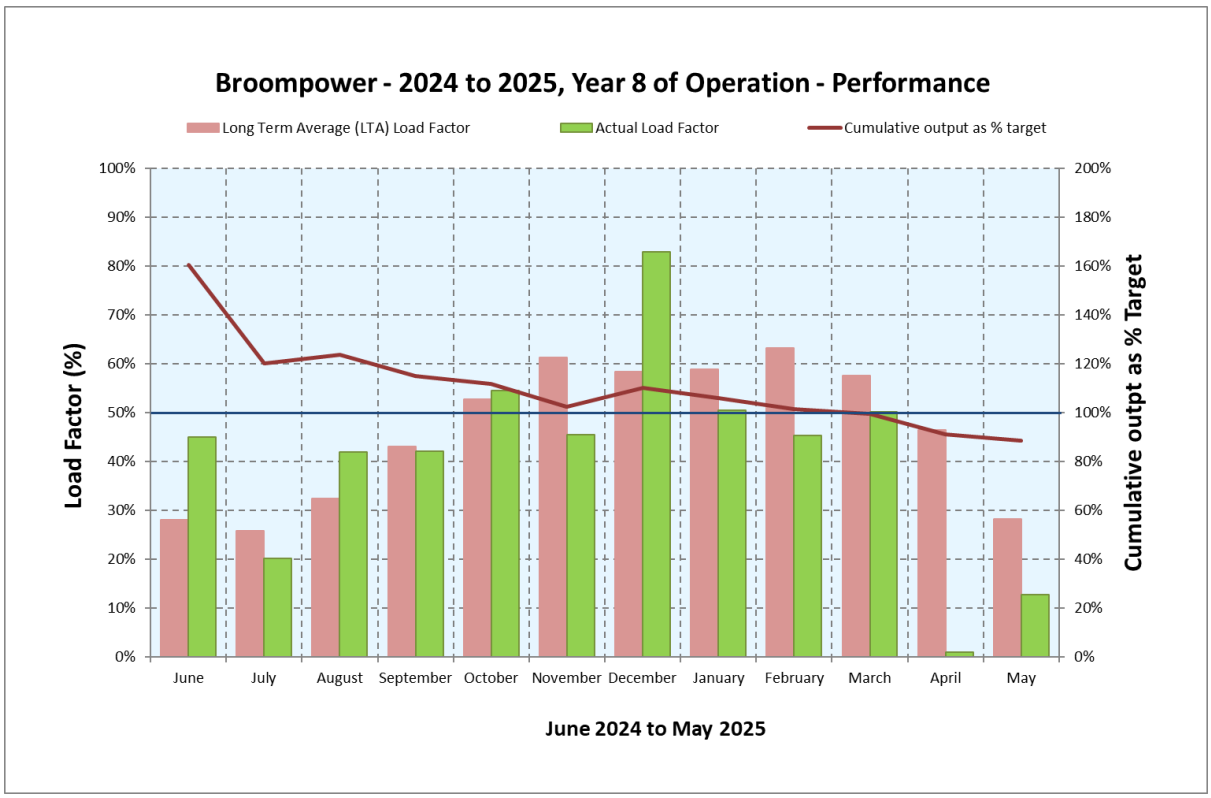
2022-2023	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	9946	16045	9072.1	35495	39265	41941	26485	56208	41140	33993	10897	2370
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£3,578	£5,772	£3,263	£12,768	£14,124	£15,087	£9,527	£20,218	£14,799	£12,228	£4,209	£1,349
Actual Load as a % of LTA	49%	84%	38%	114%	100%	95%	61%	128%	97%	79%	33%	11%
Cumulative output as % target	49%	66%	55%	75%	82%	85%	81%	88%	90%	88%	83%	79%

2022-2023	Total
Total Generation KWH	322,858
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£116,920
Actual as percentage target	80%



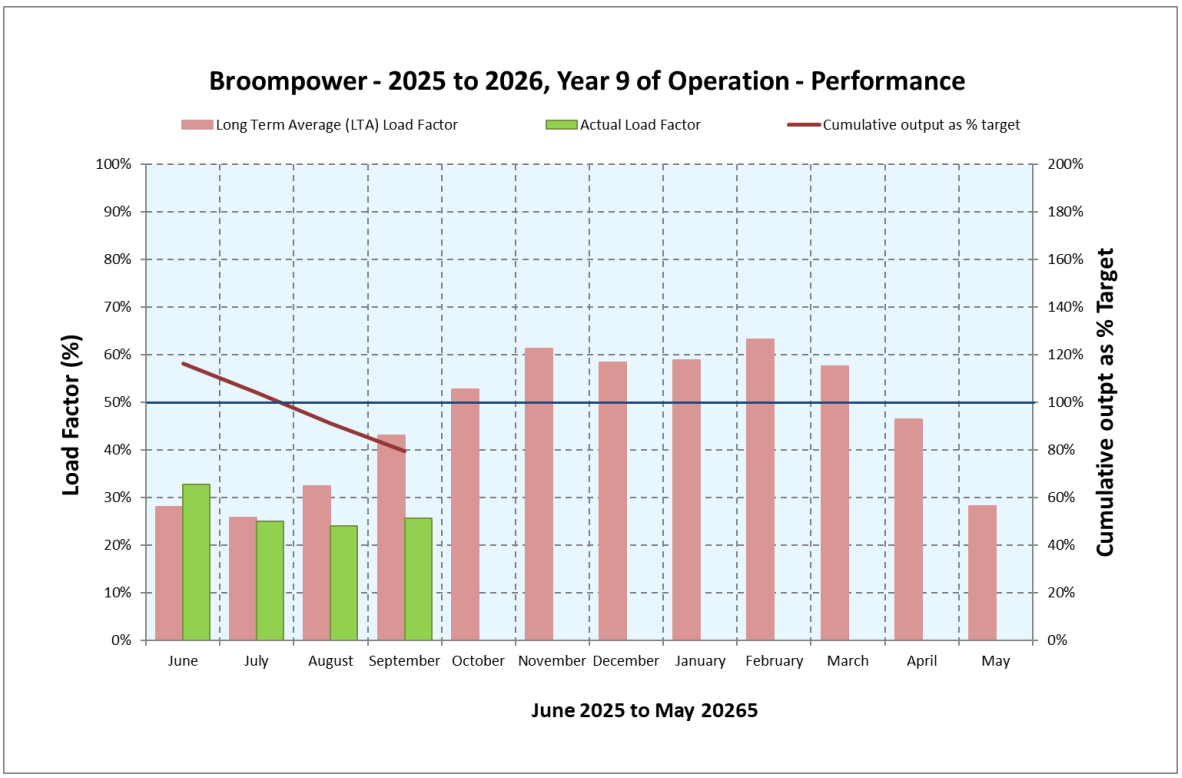
2023-2024	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	3198.4	36382.1	25913.0	33562.9	49339.2	42688.2	44829.5	43045.8	49592.2	23930.8	26097.2	2683.2
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£1,783	£20,283	£14,446	£18,711	£27,507	£23,799	£24,992	£23,998	£27,648	£13,341	£14,839	£859
Actual Load as a % of LTA	16%	190%	107%	108%	126%	97%	103%	98%	117%	56%	78%	13%
Cumulative output as % target	16%	100%	103%	105%	111%	107%	107%	105%	107%	101%	99%	96%

2023-2024	Total
Total Generation KWH	381,263
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£212,207
Actual as percentage target	94%



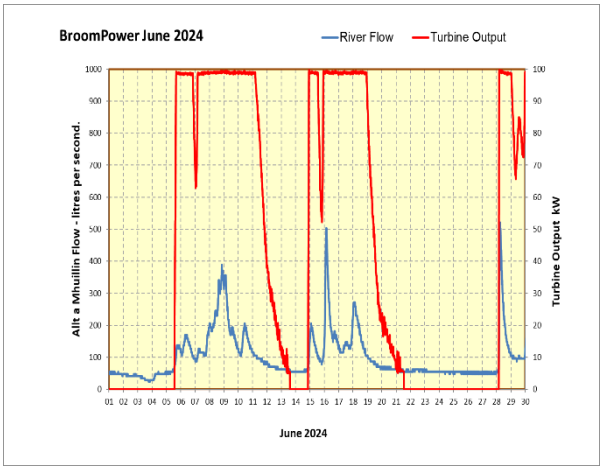
2024-2025	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	32417.7	14953.6	31179.8	30296.8	40587.1	32790.3	61644.7	37529.9	30450.1	37277.5	700.3	9535.5
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£10,380	£4,788	£9,984	£9,701	£12,996	£10,499	£19,739	£12,017	£9,750	£11,936	£230	£3,128
Actual Load as a % of LTA	160%	78%	129%	98%	104%	74%	142%	86%	72%	87%	2%	45%
Cumulative output as % target	160%	120%	124%	115%	112%	102%	110%	106%	101%	100%	91%	89%

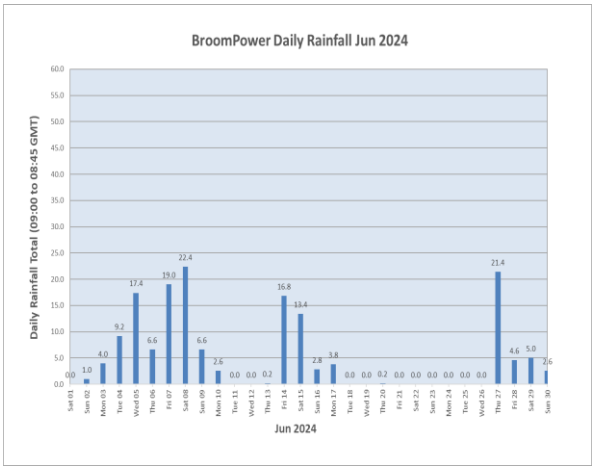
2024-2025	Total
Total Generation KWH	359,363
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£115,148
Actual as percentage target	89%

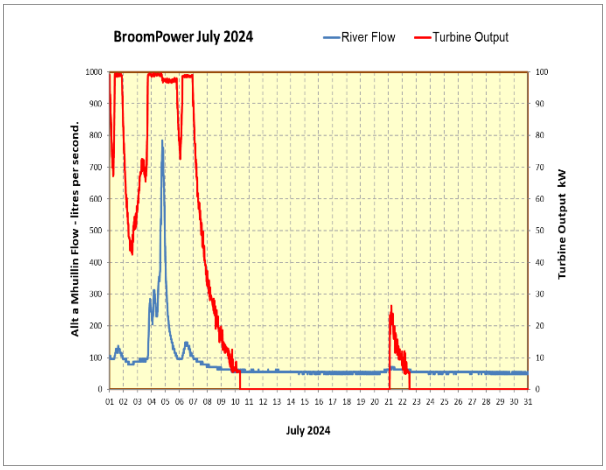


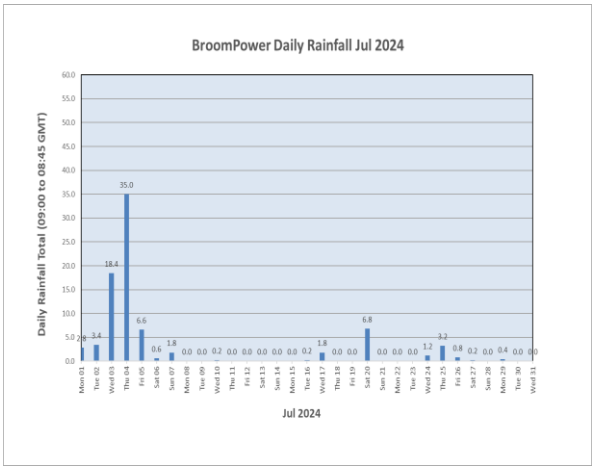
2025-2026	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Monthly Generation KWH	23530.4	18556	17912.8	18475.2								
Monthly target to generate 405000 KWH/Y	20213	19193	24151	31056	39209	44141	43411	43851	42484	42864	33453	20975
Monthy Income	£7,718	£10,696	£10,325	£10,649								
Actual Load as a % of LTA	116%	97%	74%	59%								
Cumulative output as % target	116%	104%	91%	80%								

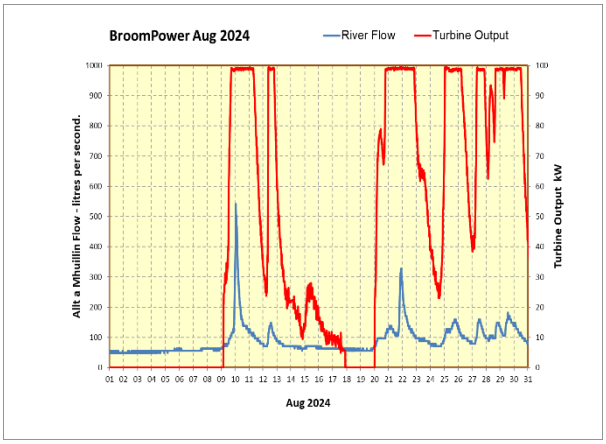
2025 - 2026 (to sept)	Total
Total Generation KWH	78,474
Annual Target 405000 KWH (See Business Plan)	405,000
Annual Income (calculated from output)	£39,388
Actual as percentage target	19%

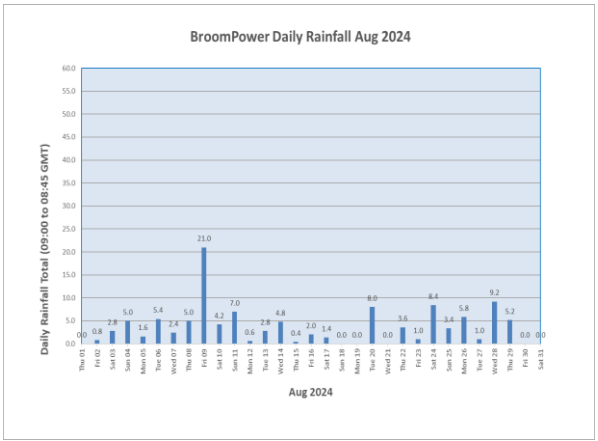

BroomPower June 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
June 2024

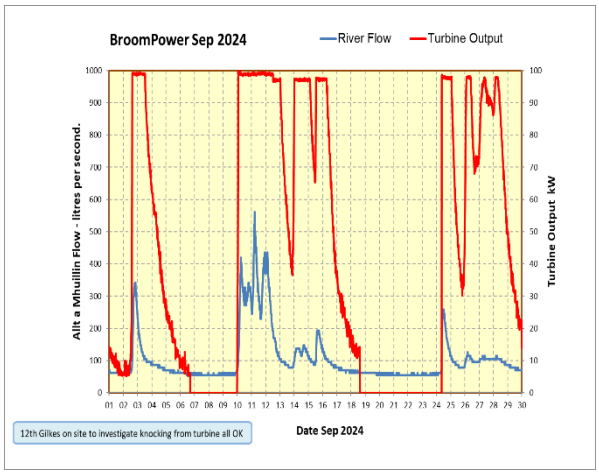

BroomPower Daily Rainfall Jun 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Jun 2024

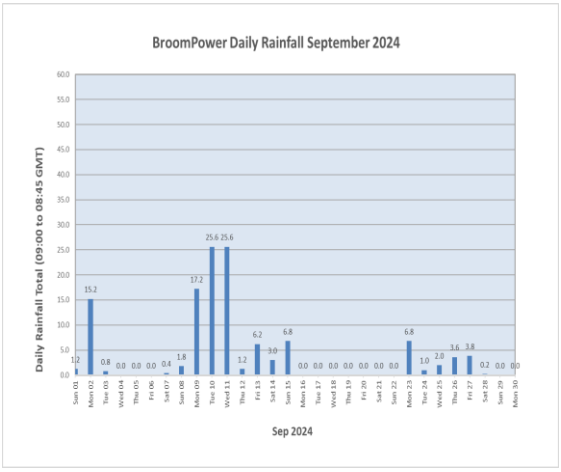

BroomPower July 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
July 2024

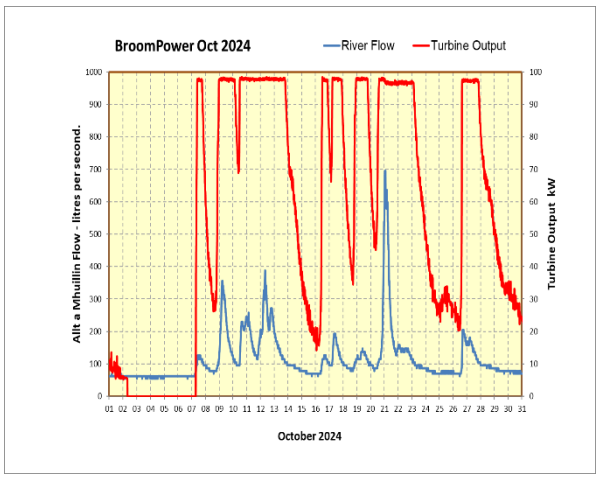

BroomPower Daily Rainfall Jul 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Jul 2024

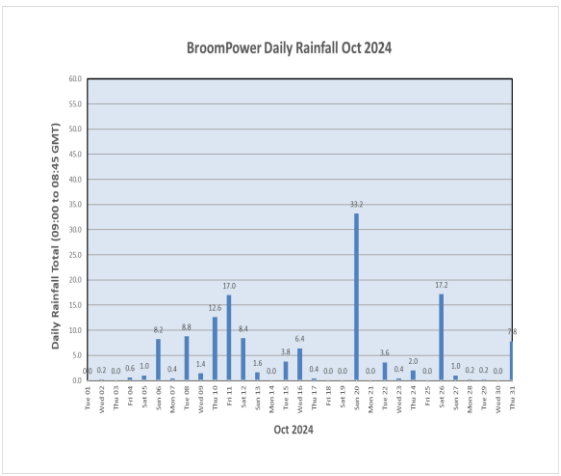

BroomPower Aug 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Aug 2024

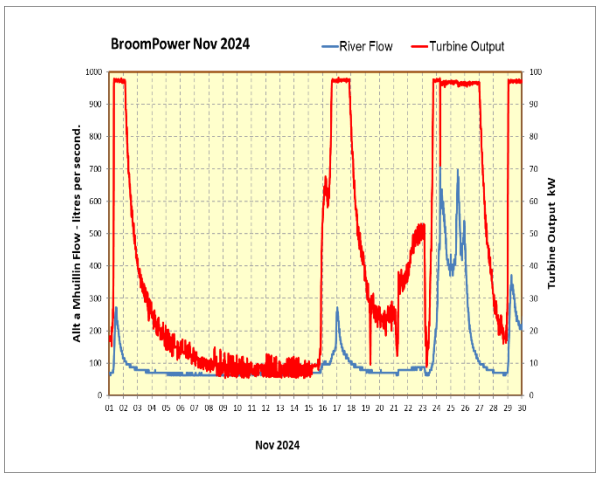

BroomPower Daily Rainfall Aug 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Aug 2024

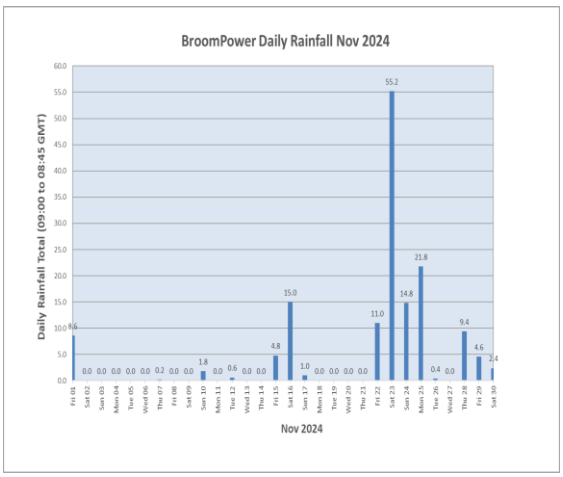

BroomPower Sep 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
12th Gilkes on site to investigate knocking from turbine all OK
Date Sep 2024

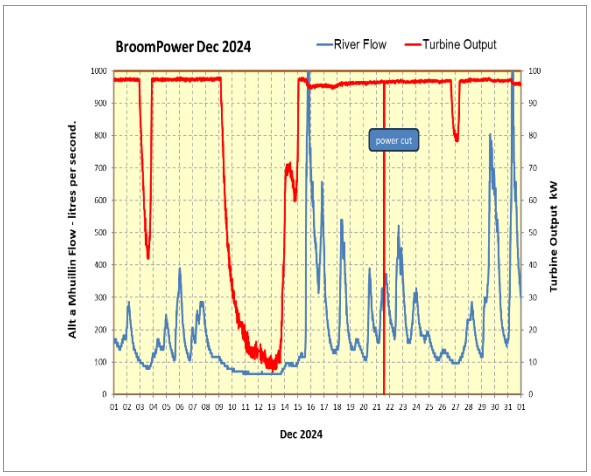

BroomPower Daily Rainfall September 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Sep 2024

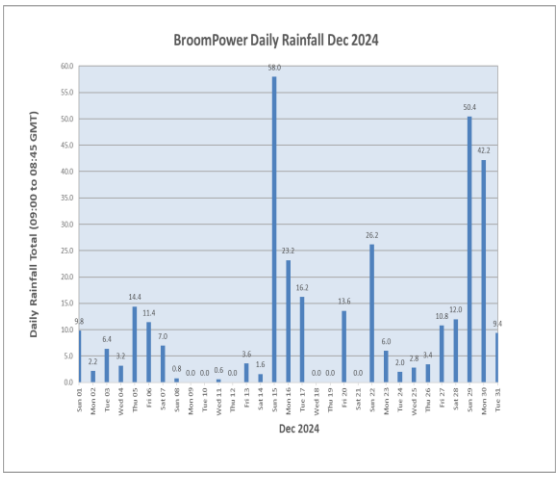

BroomPower Oct 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
October 2024

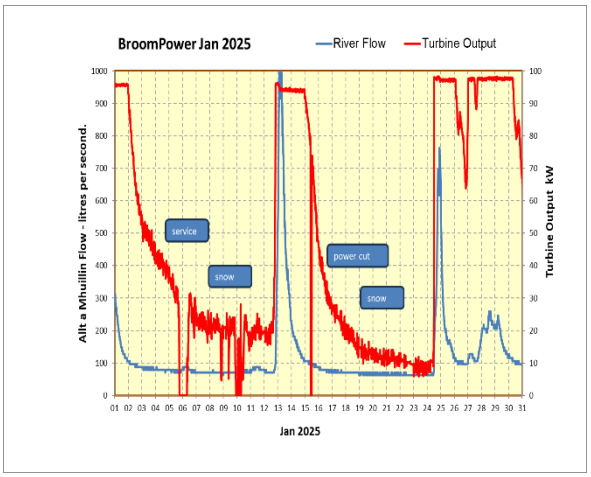

BroomPower Daily Rainfall Oct 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Oct 2024

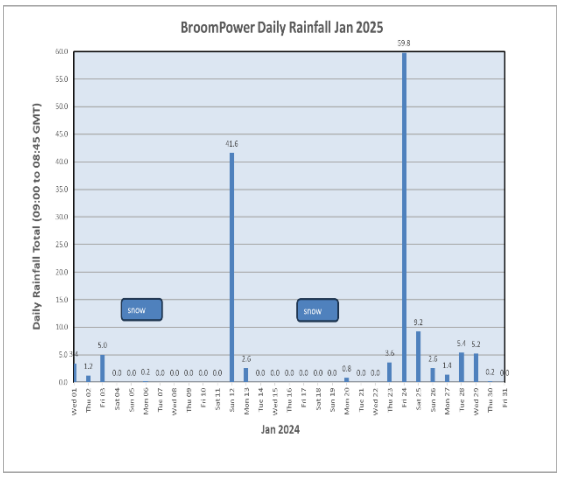

BroomPower Nov 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Nov 2024

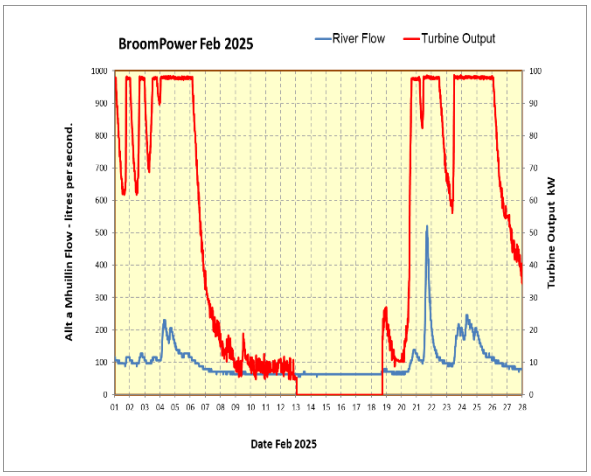

BroomPower Daily Rainfall Nov 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Nov 2024

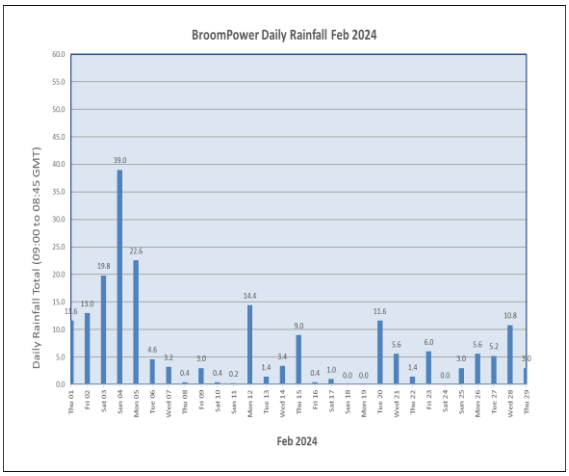

BroomPower Dec 2024
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
power cut
Dec 2024

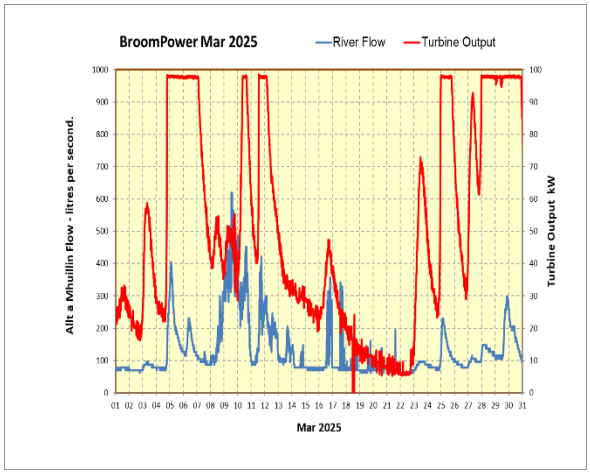

BroomPower Daily Rainfall Dec 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Dec 2024

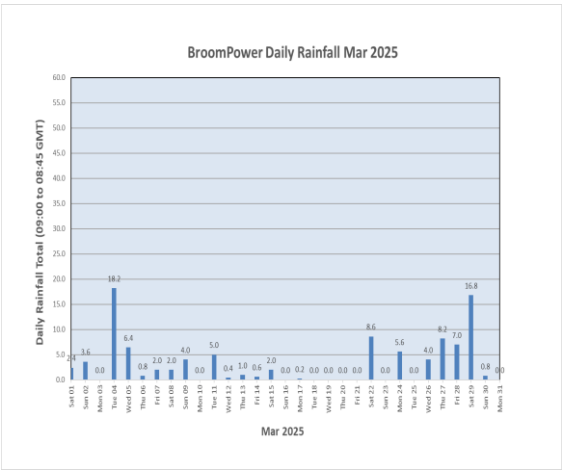

BroomPower Jan 2025
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
service
snow
power cut
snow
Jan 2025

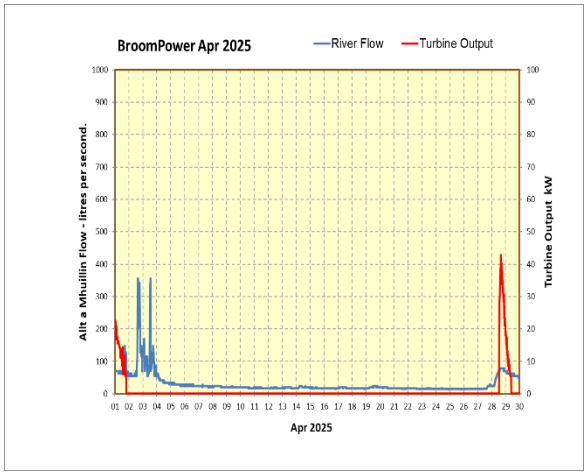

BroomPower Daily Rainfall Jan 2025
Daily Rainfall Total (09:00 to 08:45 GMT)
snow
snow
Jan 2024

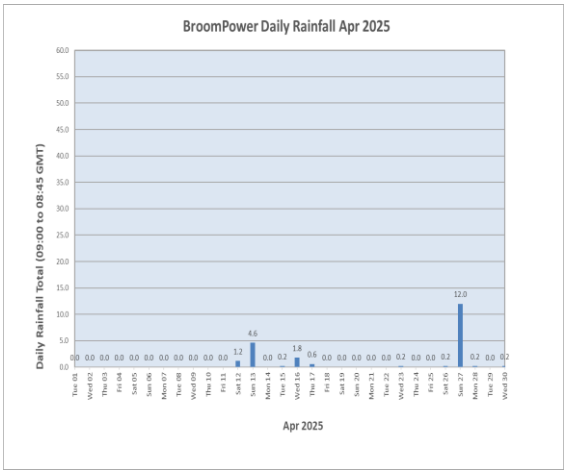

BroomPower Feb 2025
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Date Feb 2025

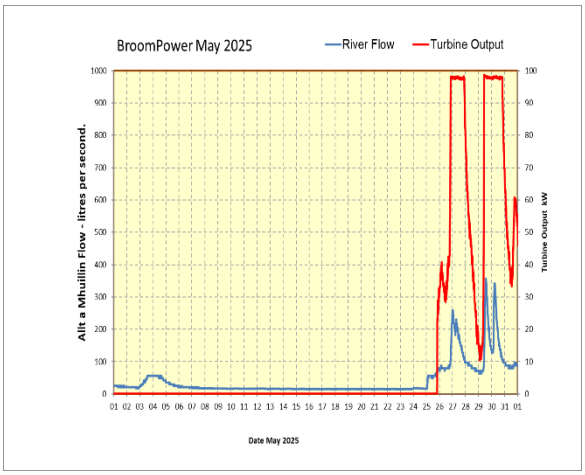

BroomPower Daily Rainfall Feb 2024
Daily Rainfall Total (09:00 to 08:45 GMT)
Feb 2024

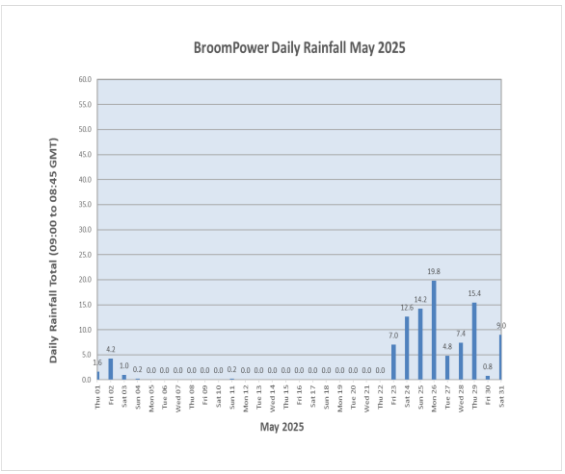

BroomPower Mar 2025
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Mar 2025


BroomPower Daily Rainfall Mar 2025
Daily Rainfall Total (09:00 to 08:45 GMT)
Mar 2025


BroomPower Apr 2025
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Apr 2025

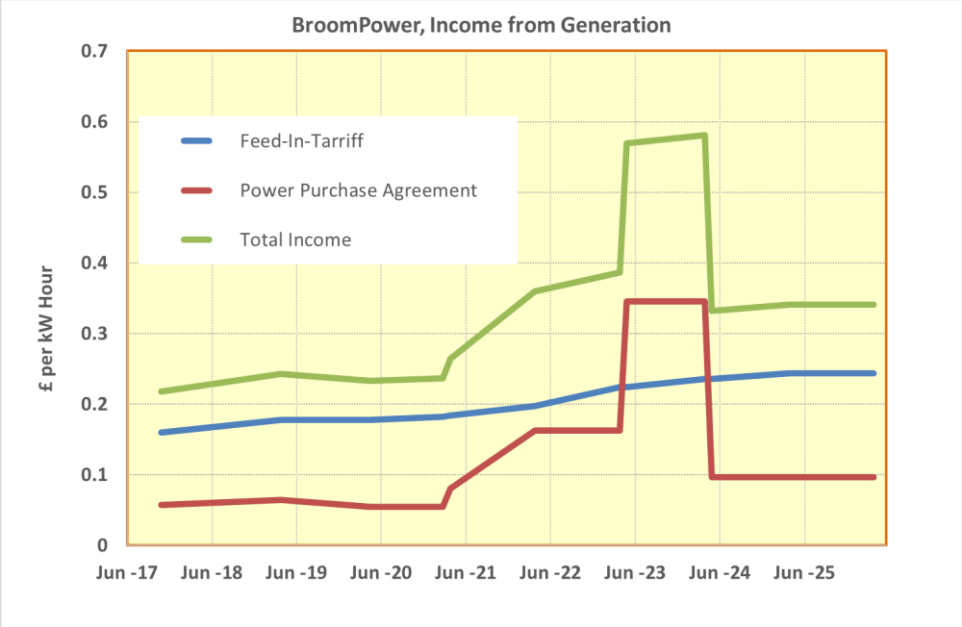

BroomPower Daily Rainfall Apr 2025
Daily Rainfall Total (09:00 to 08:45 GMT)
Apr 2025

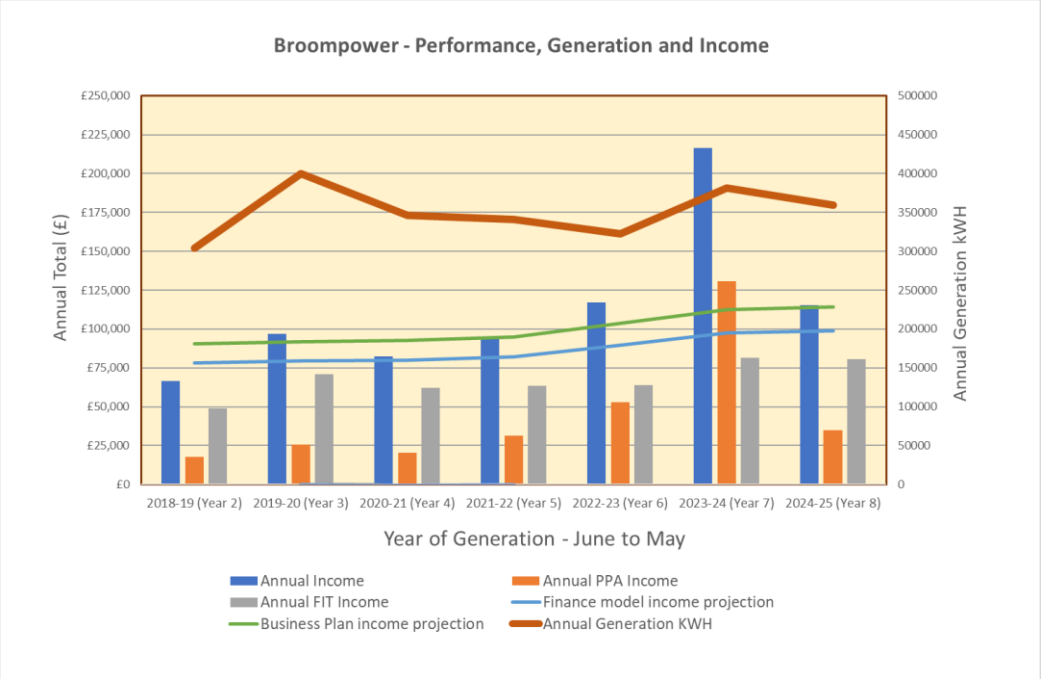

BroomPower May 2025
River Flow
Turbine Output
Allt a Mhuillin Flow - litres per second.
Turbine Output kW
Date May 2025


BroomPower Daily Rainfall May 2025
Daily Rainfall Total (09:00 to 08:45 GMT)
May 2025

Broom Power Performance

Much of this report focuses upon the climate drivers of weather and how these converts via our hydro scheme into energy, expressed as kilowatt hours. The gross income is a derived from selling the electricity: this has two components a) The feed in tariff (FIT), this is a government programme that pays the supplier for energy generated and exported to the National Grid. b) The power Purchase Agreement (PPA) this is a contract under which a business agrees to purchase electricity directly from a renewable energy generator. It pays to shop around; balancing income received with length of contract. For financial planning Broompower has two models, The first from the original business plan assumed annual generation of 405000 kWH per annum, the second based upon 5 years of actual generation, 350000 kWH. The latter reflects the climate for our operation compared to the 35 years of long-term rainfall data (Loch Droma), if 1 is the wettest and 35 the driest, the rank for the years of generation is 21,22,7,17,29,27,24,32. So 5 are in the driest third years, one about average and one wet. Caution in 2024-25 the relationship between Loch Droma and Broompower appears different, with the Droma relatively drier, there are number of reasons not explored here. Not enough information to predict climate change trends however by using the lower projection is a more conservative approach is adopted. The FIT and PPA are also linked to inflation, applies to FIT though the PPA follows market forces which have given a higher rate than inflation.





Income from Generation (£ per kWH)				
From	To	Feed-In-Tariff	Power Purchase Agreement	Total Income
01/11/2017	31/03/2019	0.16	0.0575	0.2175
01/04/2019	22/04/2020	0.1778	0.0646	0.2424
22/04/2020	28/02/2021	0.1778	0.055	0.2328
01/03/2021	31/03/2021	0.1817	0.055	0.2367
01/04/2021	31/03/2022	0.1839	0.0804	0.2643
01/04/2022	31/03/2023	0.1976	0.1621	0.3597
01/04/2023	30/04/2023	0.2125	0.1621	0.3746
01/05/2023	31/03/2024	0.2125	0.345	0.5575
01/04/2024	30/03/2024	0.2236	0.345	0.5686
01/05/2024	31/03/2025	0.2236	0.0966	0.3202
01/04/2025	31/03/2026	0.2314	0.0966	0.328
01/04/2026	31/03/2027	0.2407	0.0966	0.3373

*The Power Purchase Agreement for 2024-2025 is not fixed, the figure used is an estimated average for the period.

Site Maintenance

Weekly checks

Remote logon to download the raw data that is used to produce the monthly summaries and also a check that all is working well.

Monthly Visits

Routine visits are made on the 1st day of each month to read the monthly volumetric rain gauge. This is also an opportunity to make a visual check that all looks well. Mostly undertaken by Paul Greasing Bearings

The 4 running bearings for the (Turbine x2, Generator x2), need regreasing at a minimum every 3000 hours but can be don after 1000 hours. Completed by Paul and Sandy.

Date	Hours run since start (2017)	Hours from previous greasing
24/08/2024	36702	2451
15/12/2024	39052	2350
03/08/2025	42539	3487

Additional Visits and Services

Date	Task
12/09/2024	Visit by Gilkes to investigate Pelton Wheel 'knocking', Adjust spear and examine, no fault found.
15/01/2025	Gilkes on Site - Annual Service
30/03/2025	Trim around satellite dish and powerhouse.
13/04/2025	Shrub clearance along penstock above forest track
30/03/2025	SSEN equipment checked by IMSERVE
01/04/2025	Satellite Coms failure - no remote login.
17/07/2025	Hydrocomm instal new communications link to replace broken Satellite system.
17/07/2025	Strim/mow grass around powerhouse and track.
05/08/2025	Site visit to reboot HDI after Storm Floris power cut