

Sample Hotel - Electricity Consumption - 1

Jan 2019 - 31 Dec 2019

Total over period	
Energy	948,981.75 kWh

Daily energy	
Maximum	3,384.50 kWh on Sat, 14 Dec 2019
Average	2,599.95 kWh
Minimum	2,017.25 kWh on Thu, 26 Dec 2019

15-minute energy	
Maximum	47.25 kWh on Sun, 8 Dec 2019 between 09:45 and 10:00
Average	27.08 kWh
Minimum	0.00 kWh on Sun, 31 Mar 2019 between 01:45 and 02:00

15-minute power	
Maximum	189 kW on Sun, 8 Dec 2019 between 09:45 and 10:00
Average	108 kW
Minimum	0 kW on Sun, 31 Mar 2019 between 01:45 and 02:00

175 **MIC kva**
 166.25 **MIC kw**
 189 **MAX MIC kw**

Exceeded MIC in 5 months - this will have resulted in penalty charges - review when this happened and assess the benefits of increasing MIC to 200

3.38% increase in consumption over 2018 and a 13% increase over 2017 - the hotel has a sustained increase in electricity over 2 years - the reasons need to be examined and if customer/business related understood - better daily controls need to be implemented

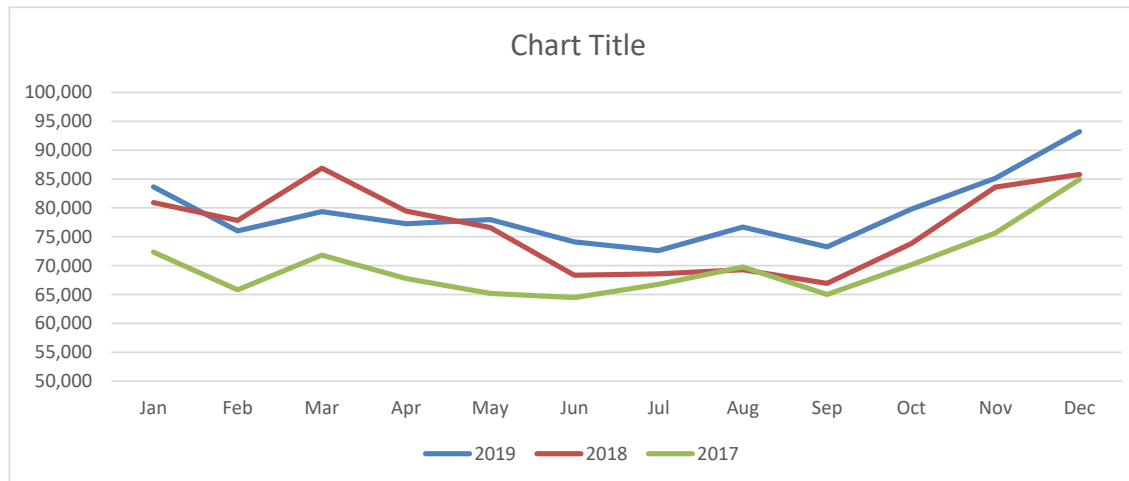
Metering and Monitoring - there is no M&M System in place - this should be installed ASAP on Electricity, Gas and Water and for the Leisure Centre as a primary user - management have no useful information on a daily/weekly/monthly basis - GREENFootprint can deliver a monitoring solution

Opportunities identified

CHP/Heat Pump	A 70kWe CHP should be assessed along with Heat Pump Technology
Metering	Mains and Leisure Centre
Solar PV	50-100 kw - CAPEX Free
Leisure Centre	Multiple Opportunities - Pool Cover, Air Handling, Barrier Doors, etc.

Monthly figures: 1 Jan 2019 - 31 Dec 2019; all days of the week

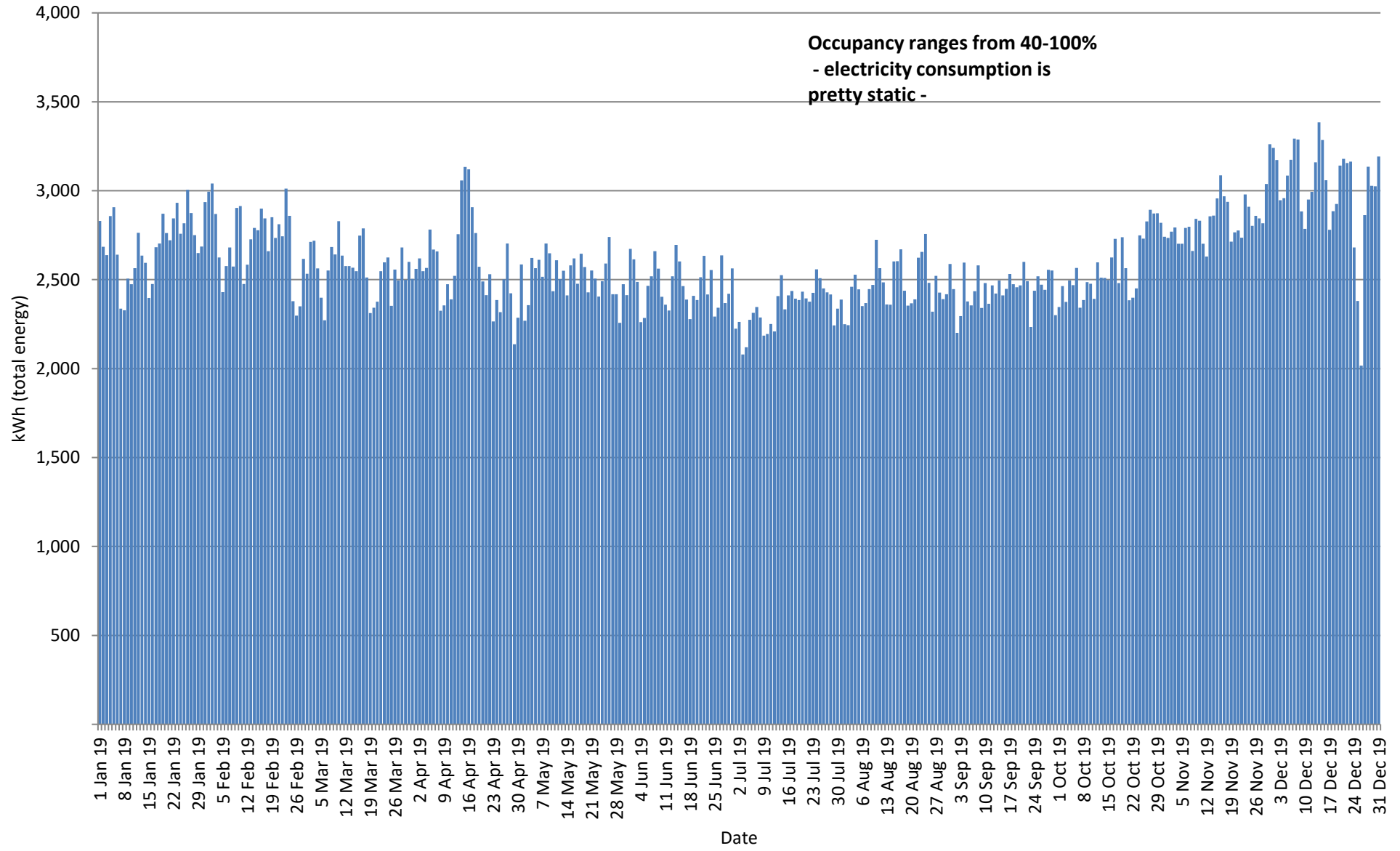
	Month	Total hours	Average kW	Maximum kW	Minimum kW	Total kWh		
						2019	2018	2017
Jan	Jan 2019	744	112	175	0	83,633	80,948	72,329
Feb	Feb 2019	672	113	180	58	76,025	77,819	65,832
Mar	Mar 2019	744	107	159	0	79,346	86,879	71,812
Apr	Apr 2019	720	107	177	52	77,234	79,438	67,784
May	May 2019	744	105	165	55	77,978	76,589	65,209
Jun	Jun 2019	720	103	158	52	74,100	68,318	64,467
Jul	Jul 2019	744	98	145	57	72,605	68,577	66,777
Aug	Aug 2019	744	103	150	53	76,671	69,278	69,772
Sep	Sep 2019	720	102	148	56	73,255	66,930	64,995
Oct	Oct 2019	744	107	163	57	79,797	73,846	70,160
Nov	Nov 2019	720	118	174	64	85,129	83,591	75,637
Dec	Dec 2019	744	125	189	64	93,210	85,768	84,943
						948,982	917,979	839,717
						-31,003		-109,265
						-3.38%		-13.01%



Consistent growth in consumption without management noticing as invoices go directly to accounts and there is no monitoring system in place

Daily total energy: 1 Jan 2019 - 31 Dec 2019

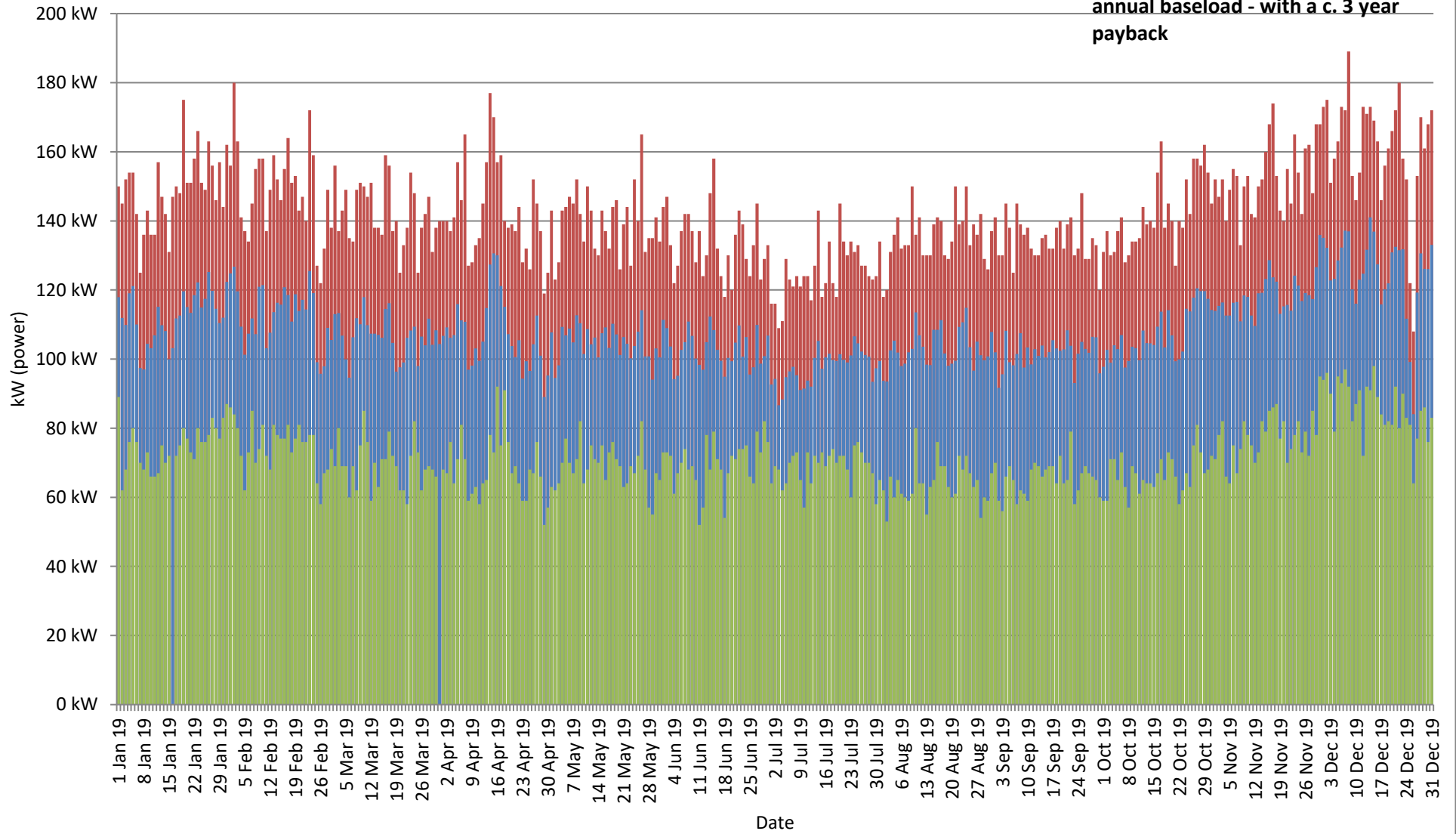
Occupancy ranges from 40-100%
- electricity consumption is
pretty static -



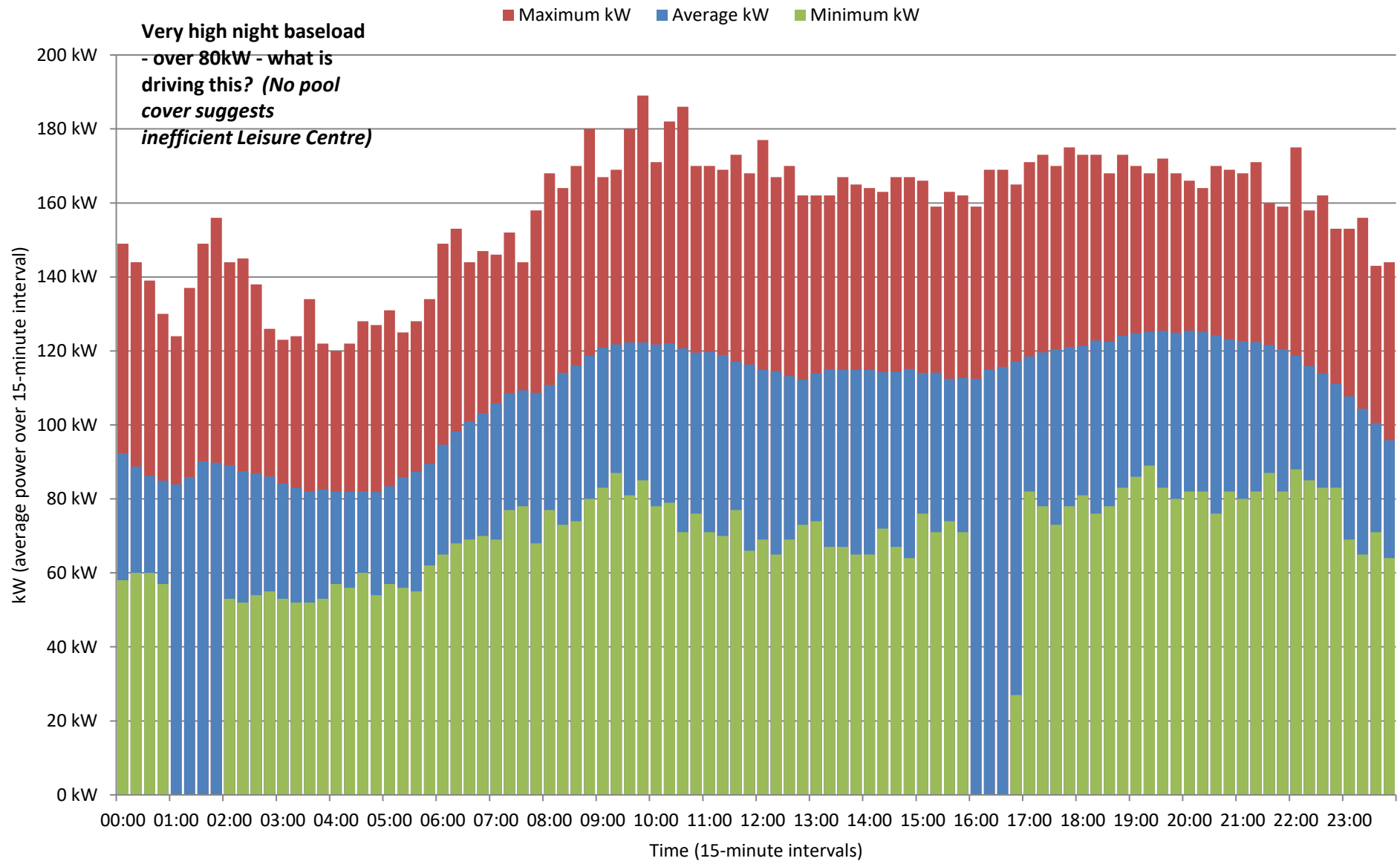
Daily power: 1 Jan 2019 - 31 Dec 2019

Maximum kW Average kW Minimum kW

Daily average demand suggests
a 70kW CHP would deliver the
annual baseload - with a c. 3 year
payback



Average, maximum & minimum profile: 1 Jan 2019 - 31 Dec 2019; all days of the week



Average, maximum & minimum profile: 1 Jan 2019 - 31 Dec 2019; all days of the week

