

# Financial Impact of SSEG tariffs on utility revenue

Do Feed In tariffs affect electricity income ?

SARPA/AMEU Eastern Cape Conference

Port Alfred

18-19.08.2022

## Boom in small-scale solar installations in South Africa

- South Africa imported solar PV panels worth **nearly R2.2 billion in the first five months of this year** alone, a Reuters analysis of customs data has found.
- **That amounts to over 500 megawatts of peak generating capacity**, analysts say. Once installed, the panels will increase the 2.1 gigawatts of estimated existing small-scale solar generating capacity by some 24%, *surpassing what the government has managed to procure in a decade of its utility-scale solar strategy*, [Reuters](#) said.
- “It’s completely unrecognised by the government as to how big an industry it’s become,” said Frank Spencer, spokesman for the South African Photovoltaic Industry Association. “It’s a silent revolution.”
- [Staff Writer](#) 15 August 2022 (Businessstech)



# Overview

- Real import/export data only started January 2022
- Due to relatively short time frame, this analysis is high level
- As we obtain more data, a more detailed analysis can be done
- Future analysis to include hourly consumption profile – T.O.U ?

(ESKOM has indicated that they intend to make T.O.U compulsory for there SSEG customers)



# Background

BCMM has also experienced an increase, particularly Residential systems

Feed In Tariff (Export) was first introduced 2021/2022 tariff book

- Currently Consists of 2 tariffs based on type of supply:

- Tariff 1: 1 and 3 phase installations

- Kwh Import/Export
- Service Fee

- Tariff 2: CT Metered Installations

- Kwh Import/Export
- kVA Import
- Service Fee



# NERSA changes the goal post

- BCMM NERSA Tariff application:
  - Previous years NERSA approved the applied for SSEG tariff
  - 2022/2023 application NERSA changed course by indicating that:

*“....NERSA lacks both statutory and regulatory jurisdiction over the proposed activity between yourself and the Small Scale Embedded Generators”*



It is therefore up to the municipality to determine a SSEG tariff that:

Encourages the uptake of SSEG

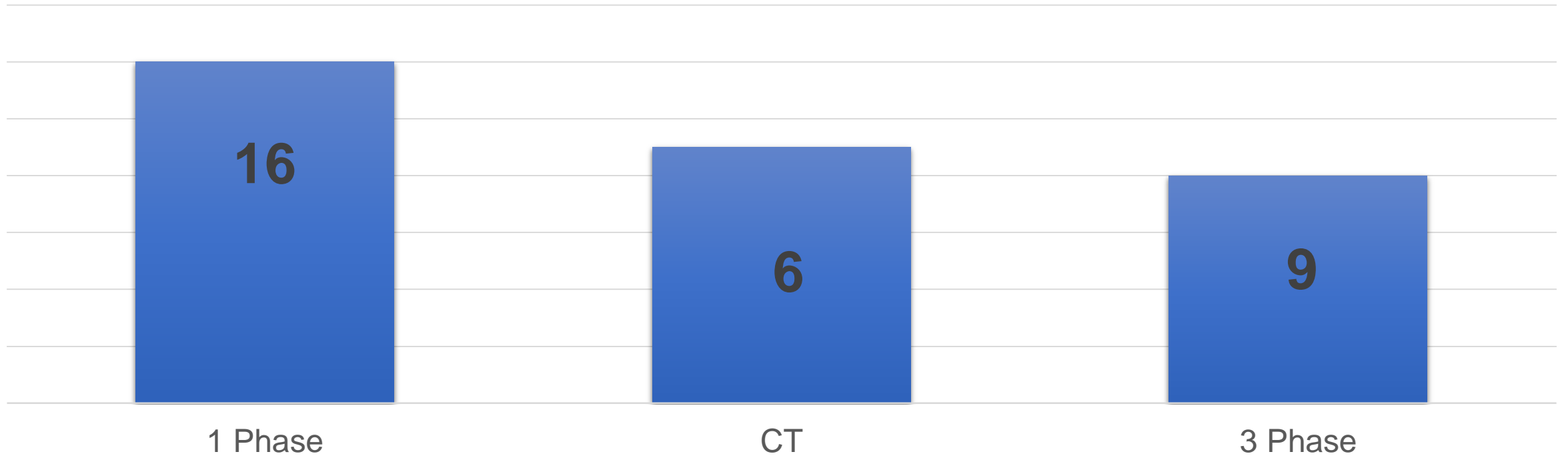
While also ensuring that

Overall electricity income is not negatively affected

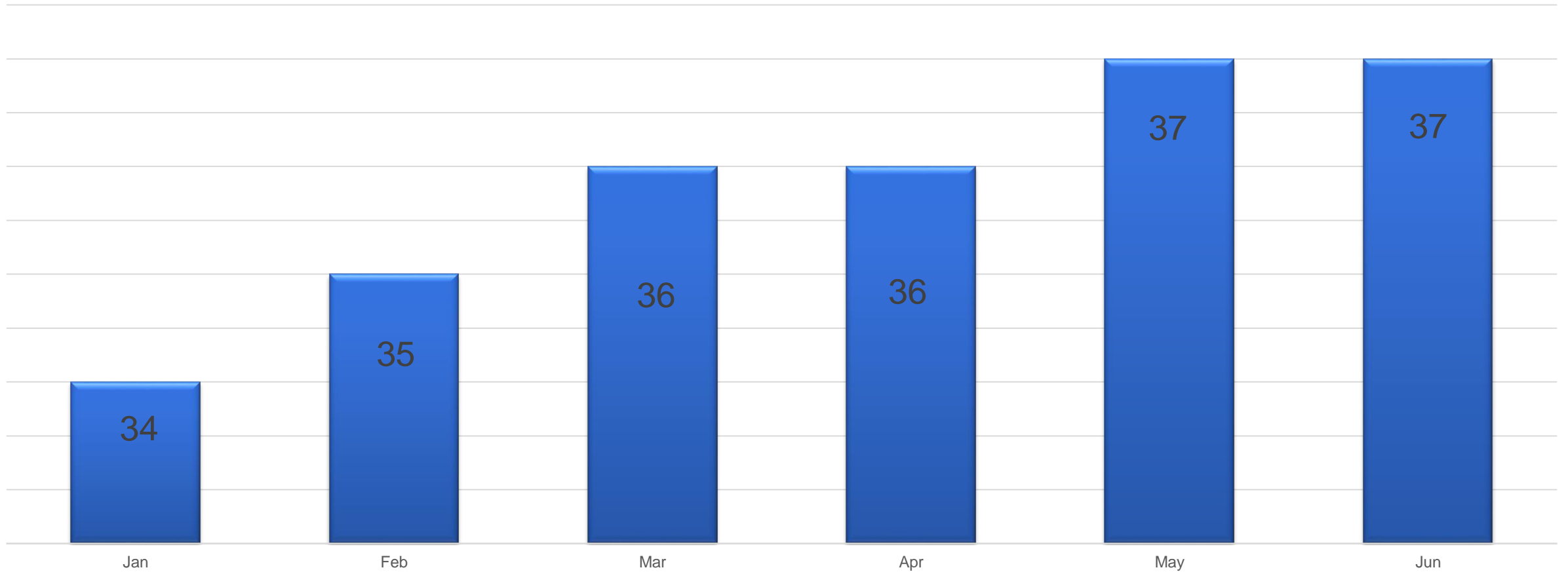


# Current Status

- BCMM has received 31 official applications as at end July 2022

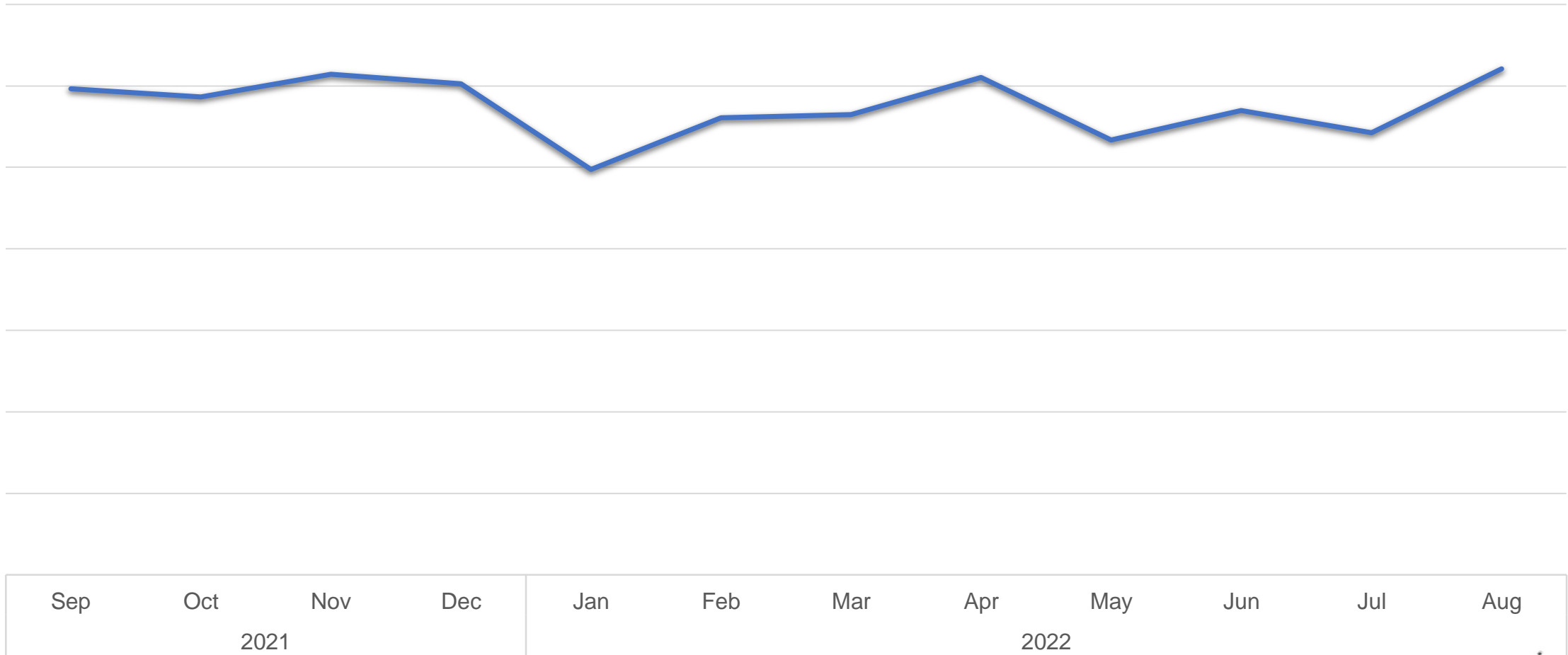


# Consumers Exporting — most probably more

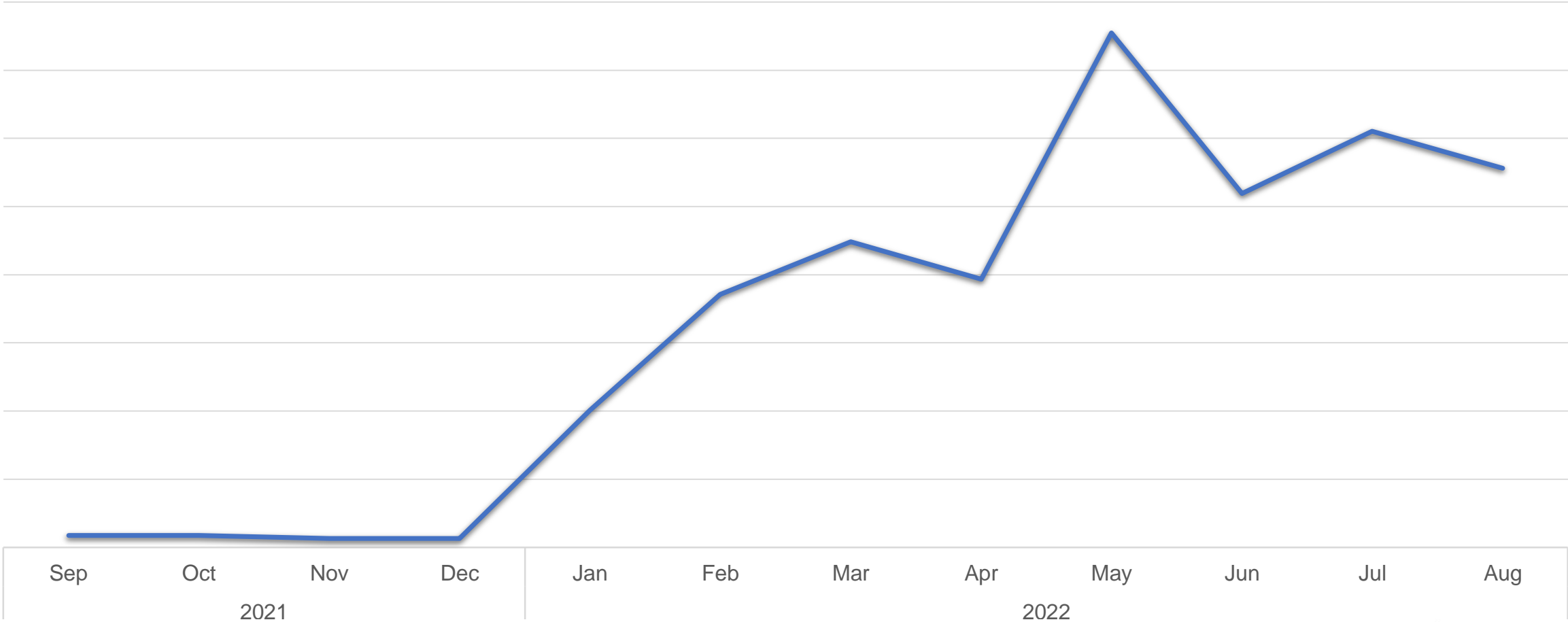




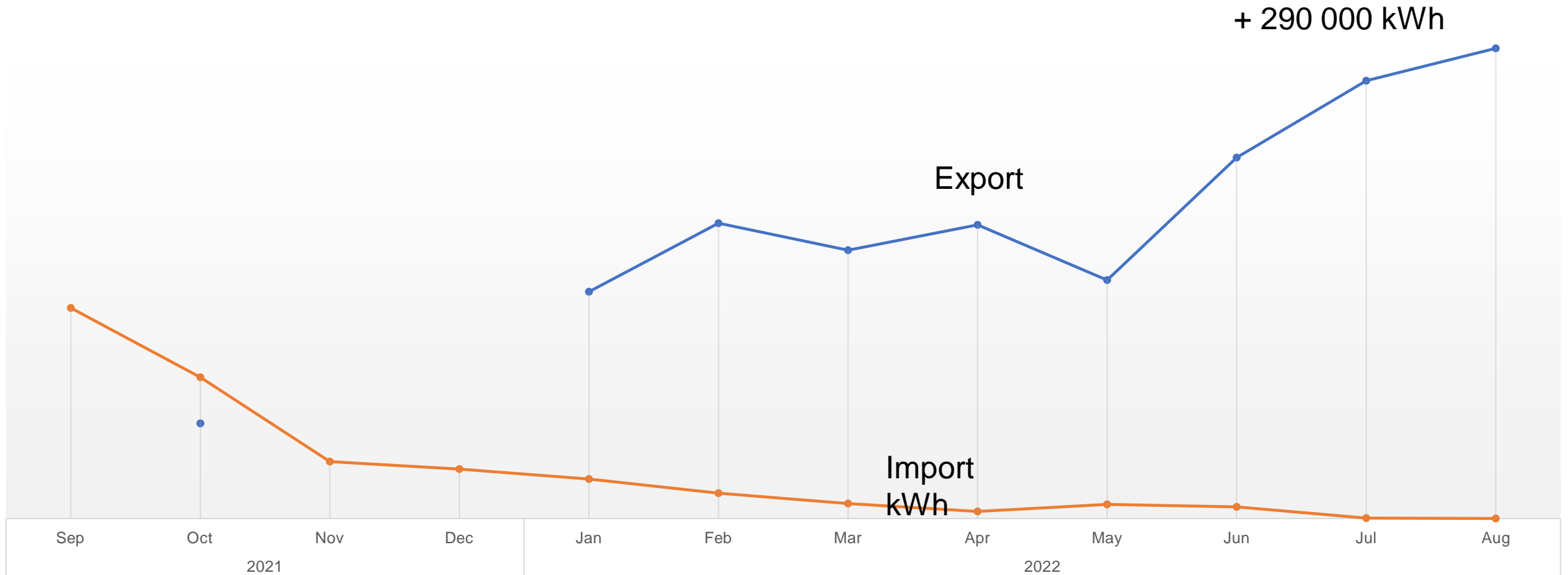
# Overall Import kWh



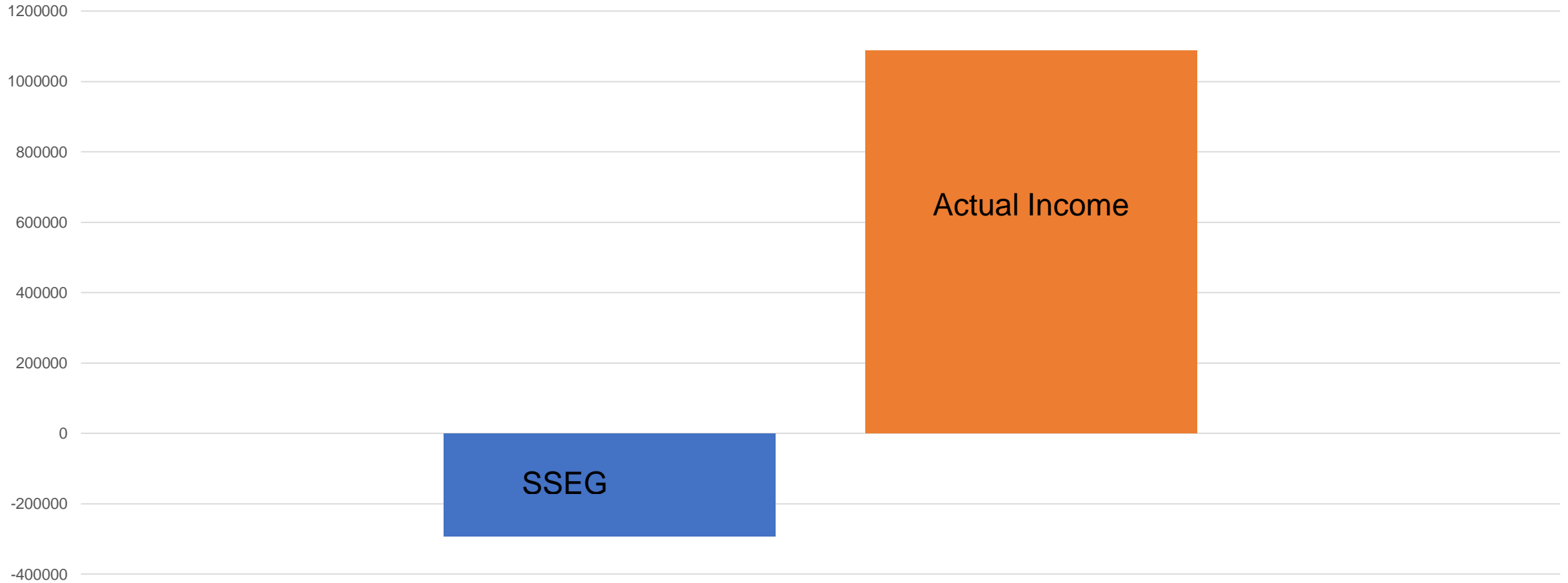
# Overall Export kWh



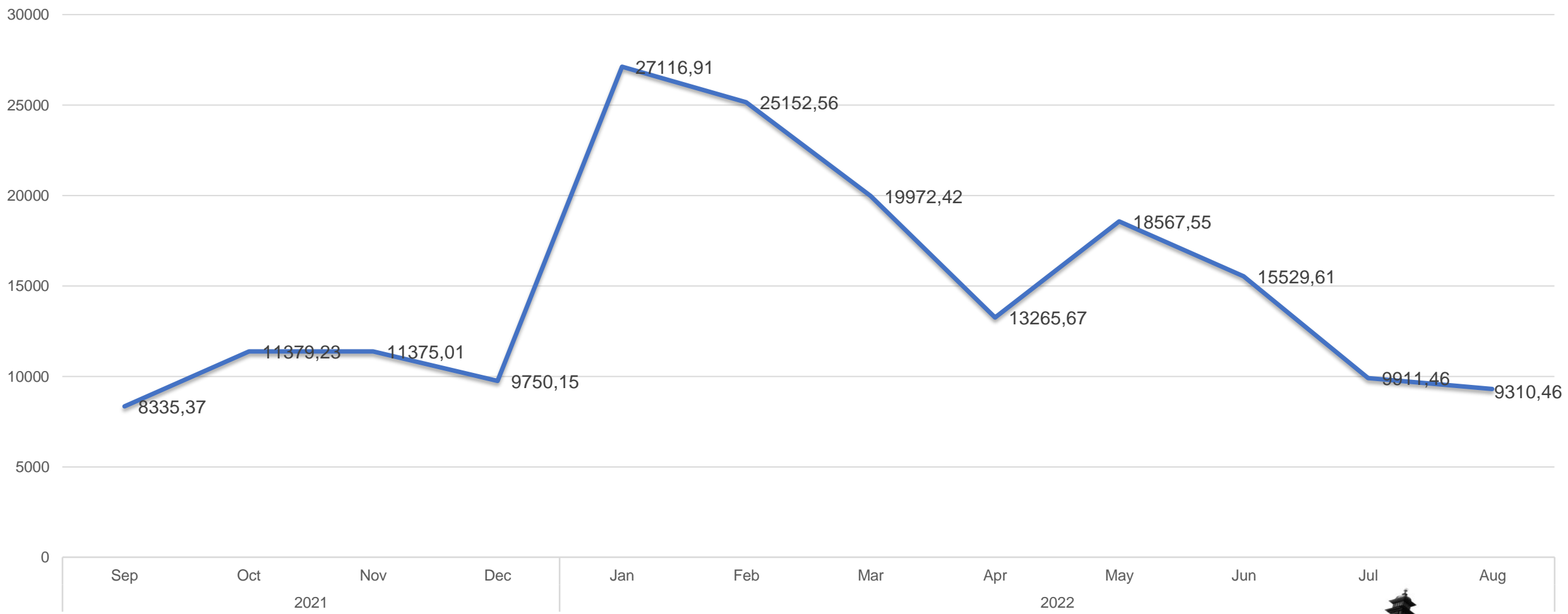
# Above graph skewed by 1 consumer:



# If this consumer was on SSEG Tariff



# Overall Export kWh for applied consumers



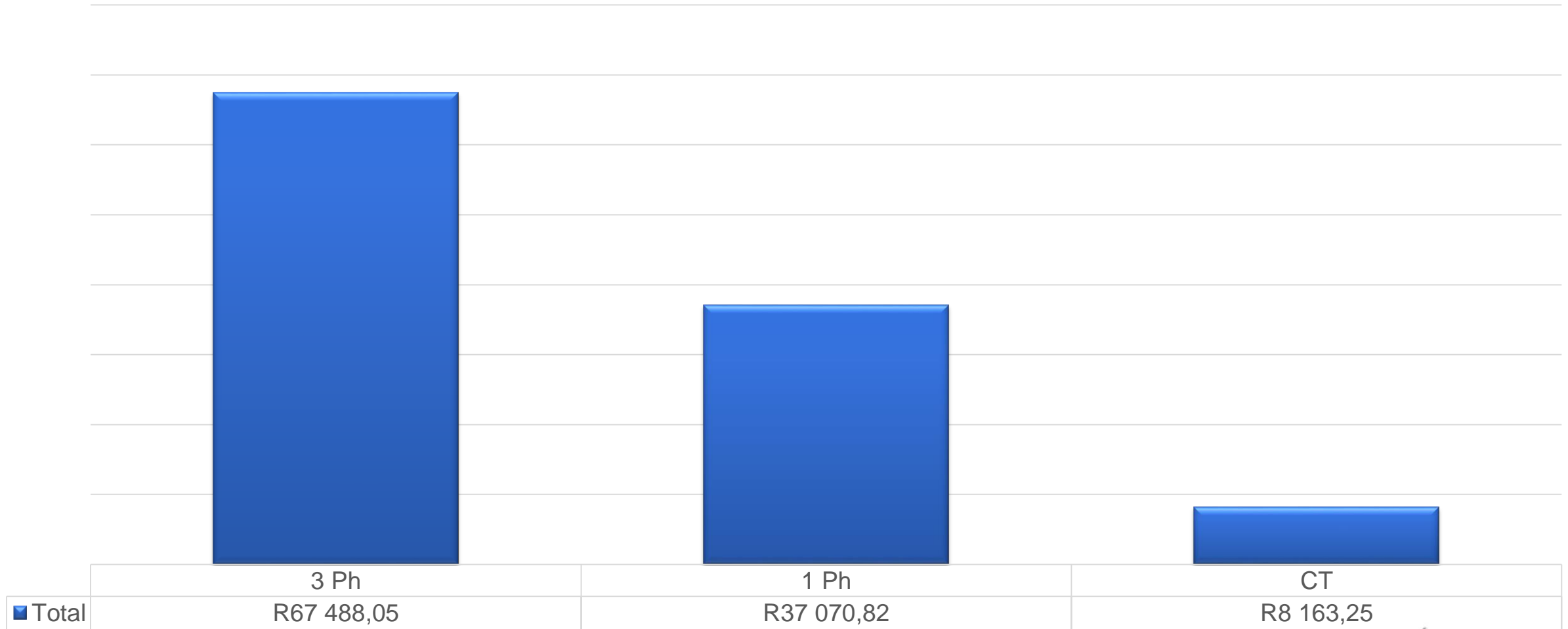
# Financial Impact

- Period of analysis: January 2022 – July 2022
- Consumption data obtained from SM system (4 quadrant meters)
- On Sell: kWh exported by SSEG and resold to another consumer at the price of: Std kWh Tariff less Export kWh Tariff
- We pay the Export tariff (credit) for the electrons and sell to neighbour at Standard tariff (debit)



What impact does On Sell have on income  
?

# Revenue generated by on selling Kwh





# Overall Financial Impact

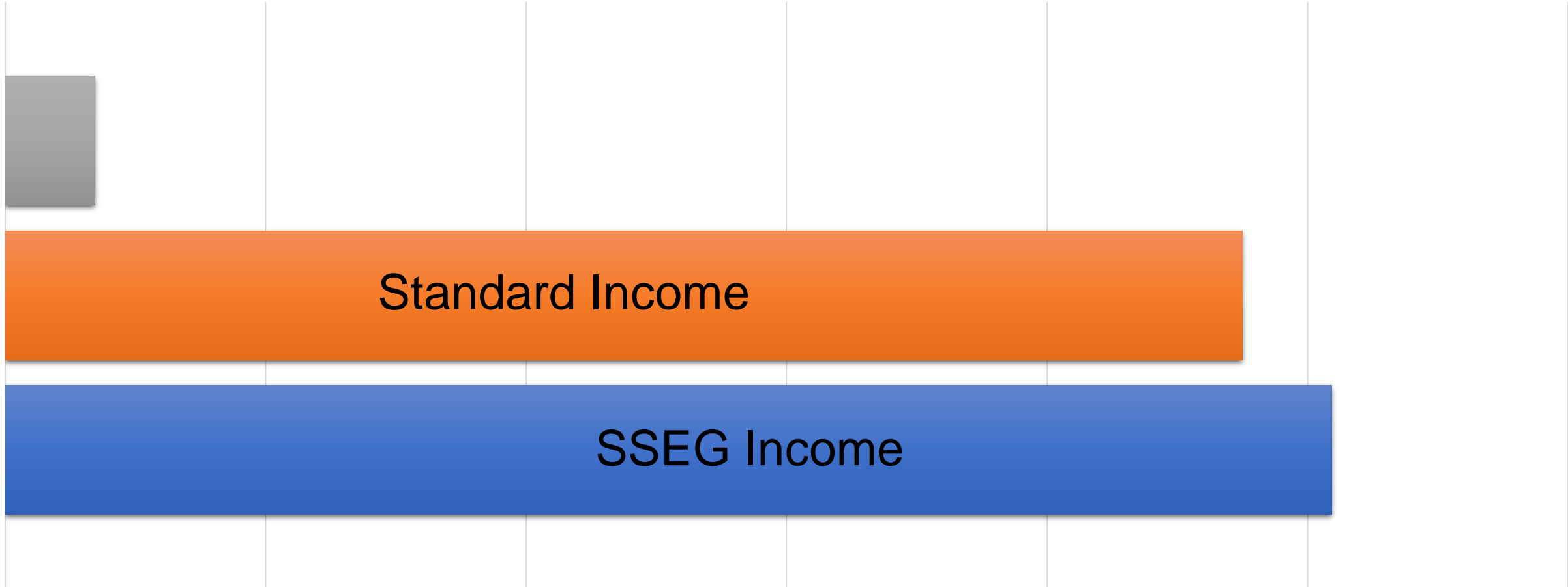
- As the tariff is currently structured:

(The below results are when Feed In Tariff is included)

- 1 Phase – Positive impact on Revenue
- 3 Phase: Negative impact on Revenue
- CT: Negative impact on Revenue (smaller than for 3 phase)



# 1 Phase Supply

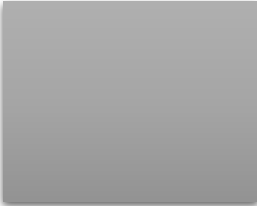


Standard Income

SSEG Income



# 3 Phase Supply



Standard Income

SSEG Income



# CT Supply



Standard Income

SSEG Income



# In conclusion:

- This analysis as earlier explained is still in the early stages
- What is clear, the SSEG tariff does have an affect on revenue:
  - Further detailed analysis is still required to determine (amongst others):
    - The affect of seasonality
    - What is the affect of different consumption profiles
- This data then needs to be incorporated into the Cost of Service study

