Evaluation of Washing Machines Efficiency Policy and its impacts in India

Kishore Kumar PVN
Manager, CLASP India
September 28, 2022

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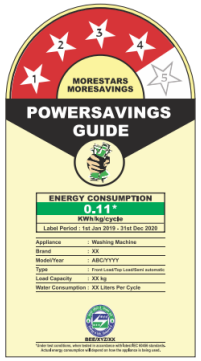
Journey of Washing Machine Labelling Program

2010

Voluntary program launched for Semi and Fully automatic Washing Machines

2013

Program announced abeyance due to challenge in testing (soil strip and detergent)



2019

Revived the Washing Machine Program by India

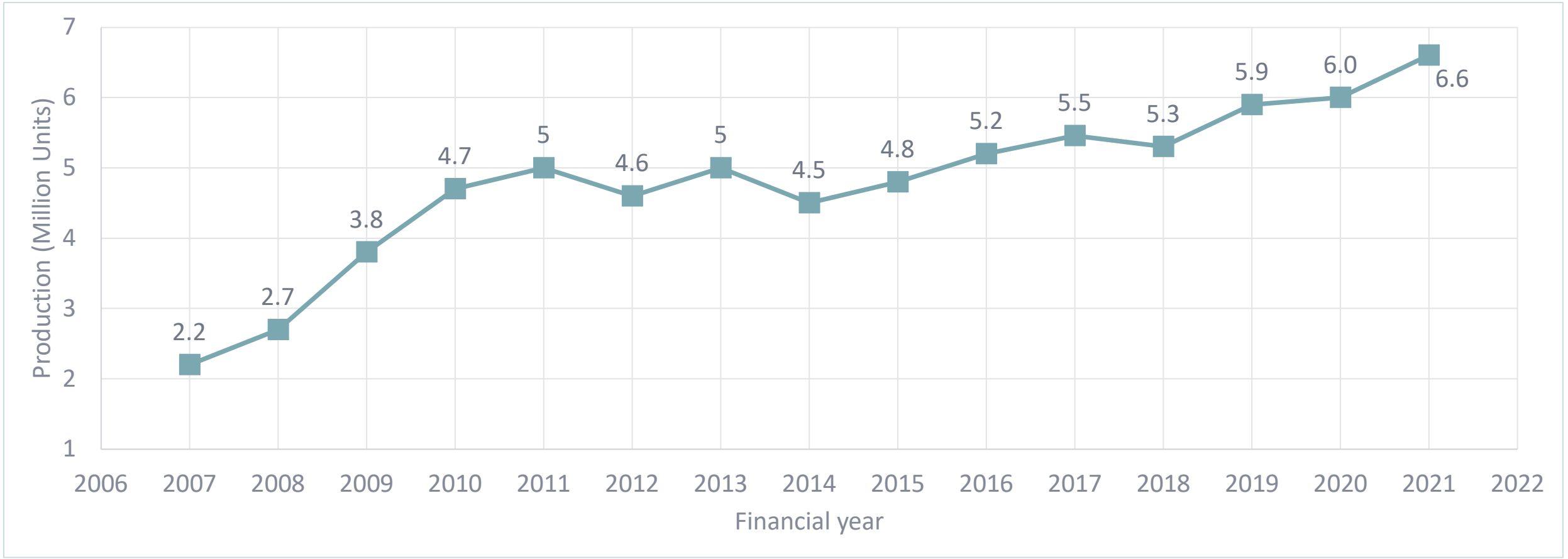
Relaunched for front load, top load and semi automatic categories

2022

The program validity is till 31st December 2022

Overview of Market from 2007-2021

Washing machine Market Growth (2007-2021)

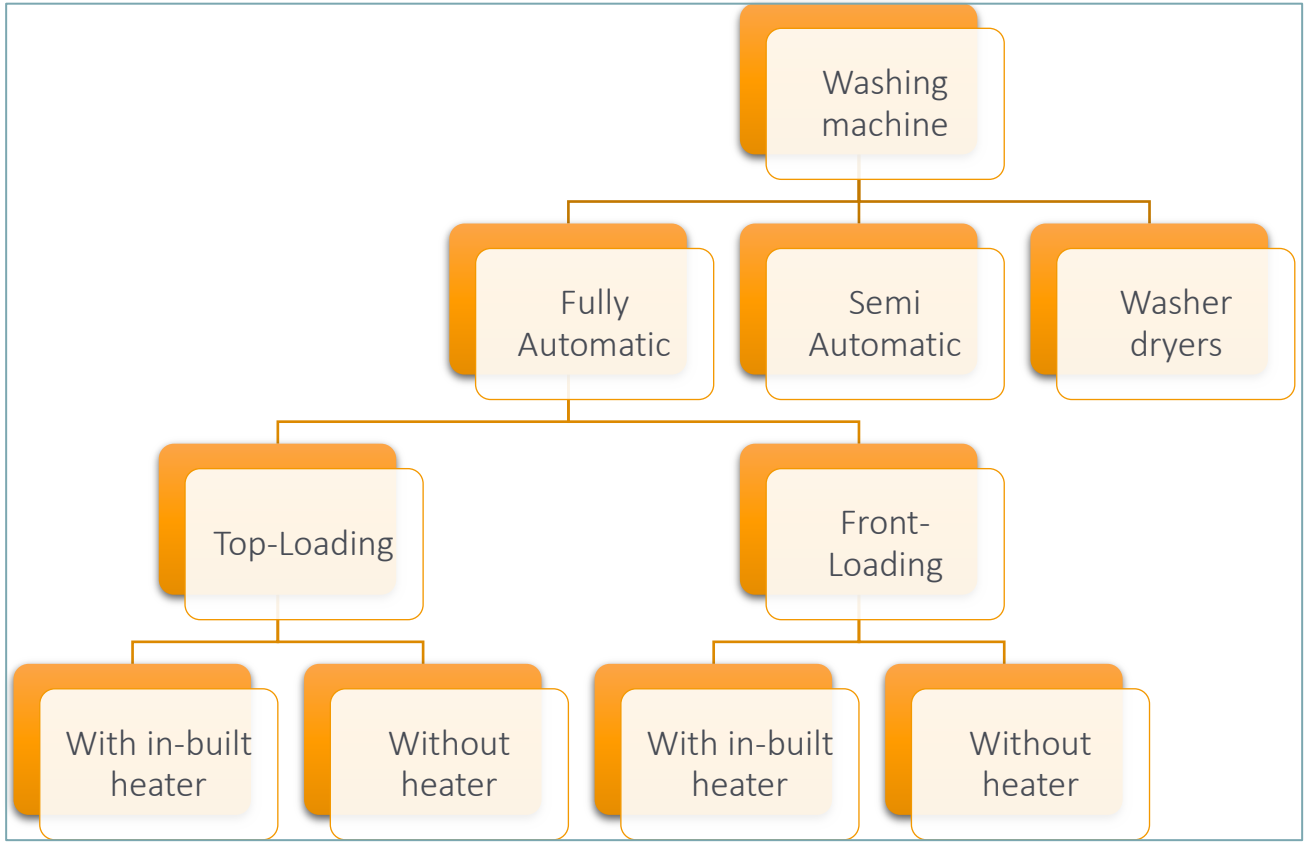


- Overall Washing machine market got increased by 3 fold in last 15 years due to the increase in income levels of the Indian middle class and innovations in the technology.
- However, Washing machine penetration in India is at 16% and the demand still remains low, representing a huge potential for the expansion of this market.

Source of Data : CEAMA

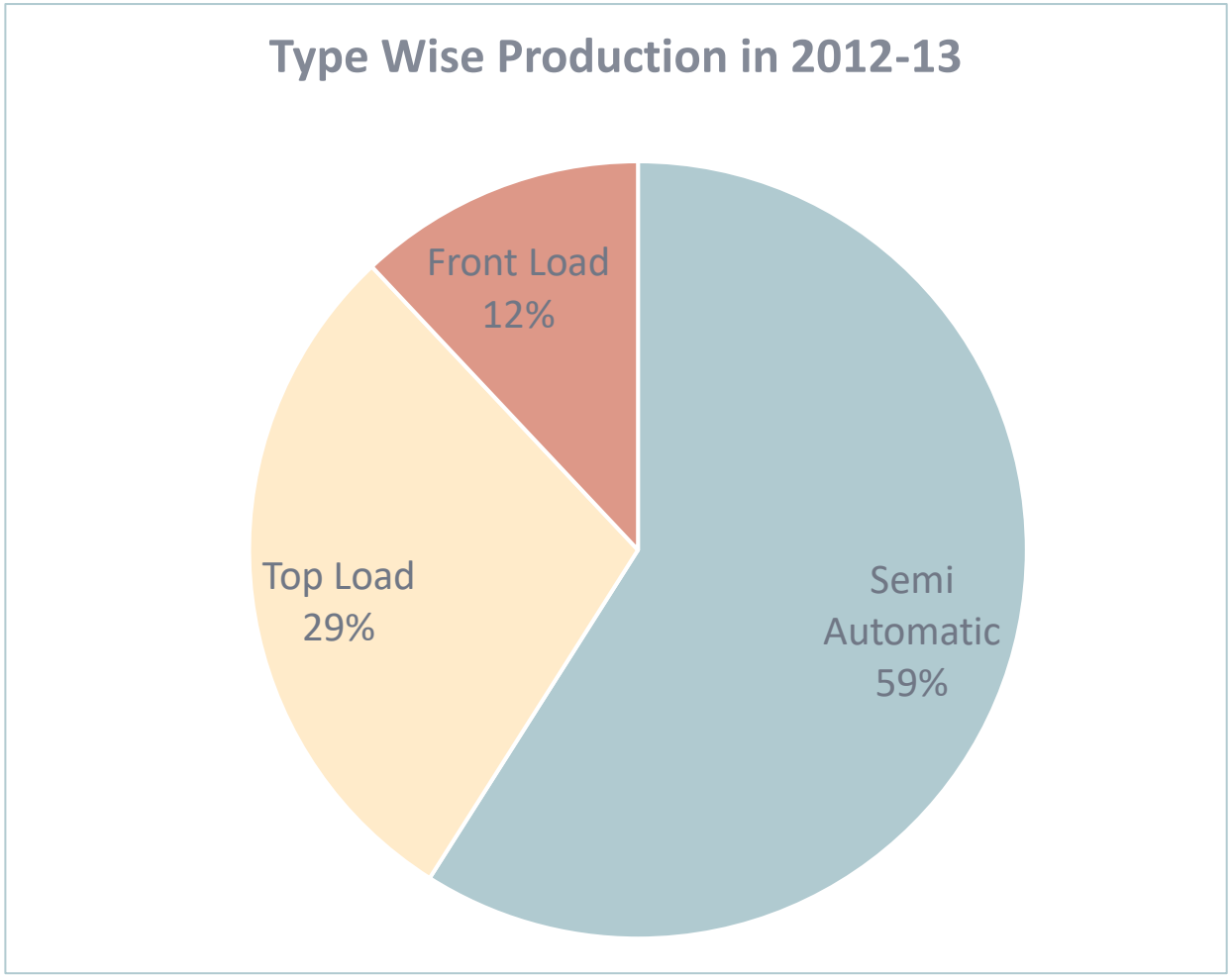
Types of Washing Machines available in India

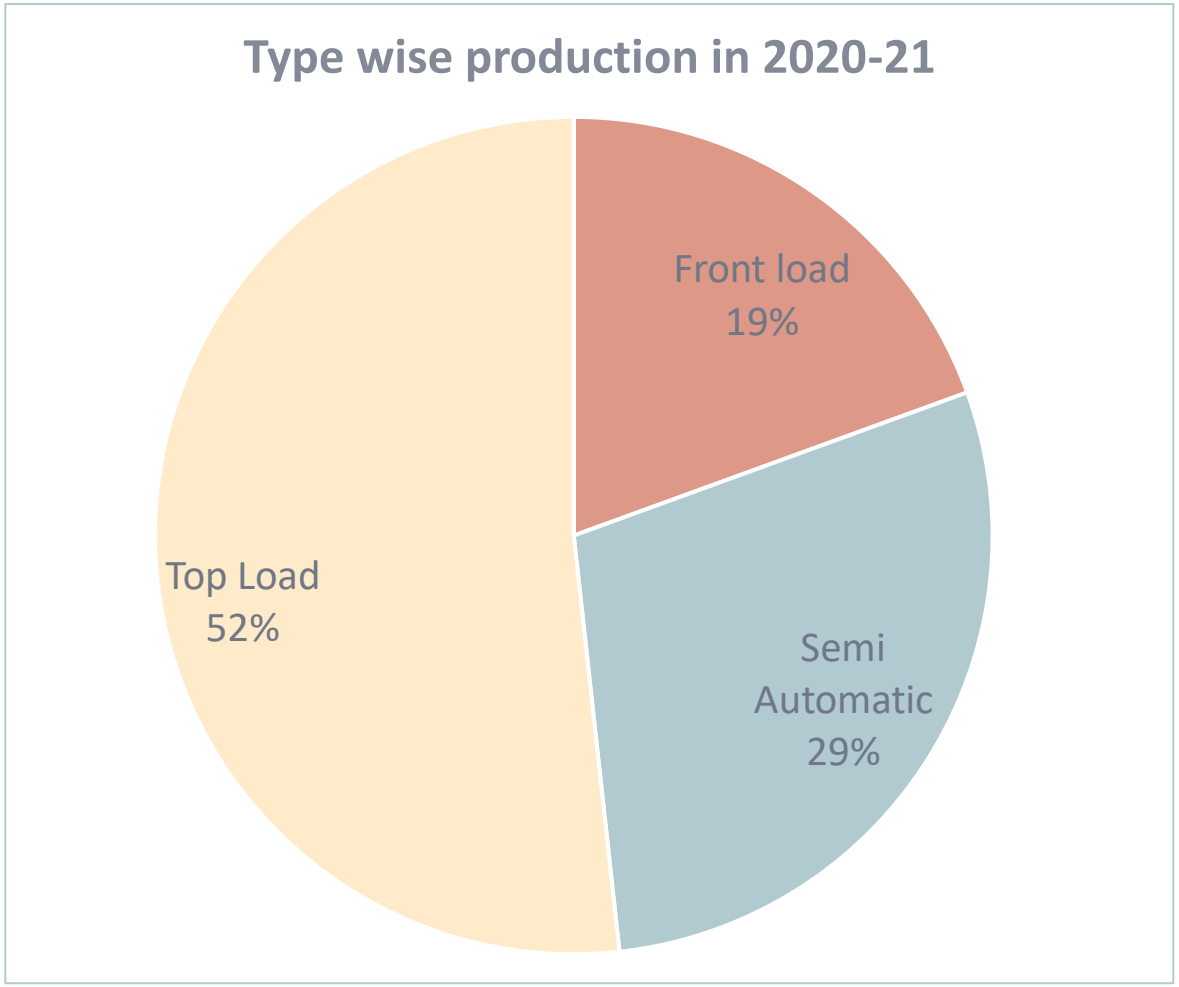
- A washing machine is a **home appliance** used to wash laundry, such as clothing and sheets.



Semi-automatic	Fully automatic –front-loading
	
Fully automatic – Top loading	**Washer dryer**
	

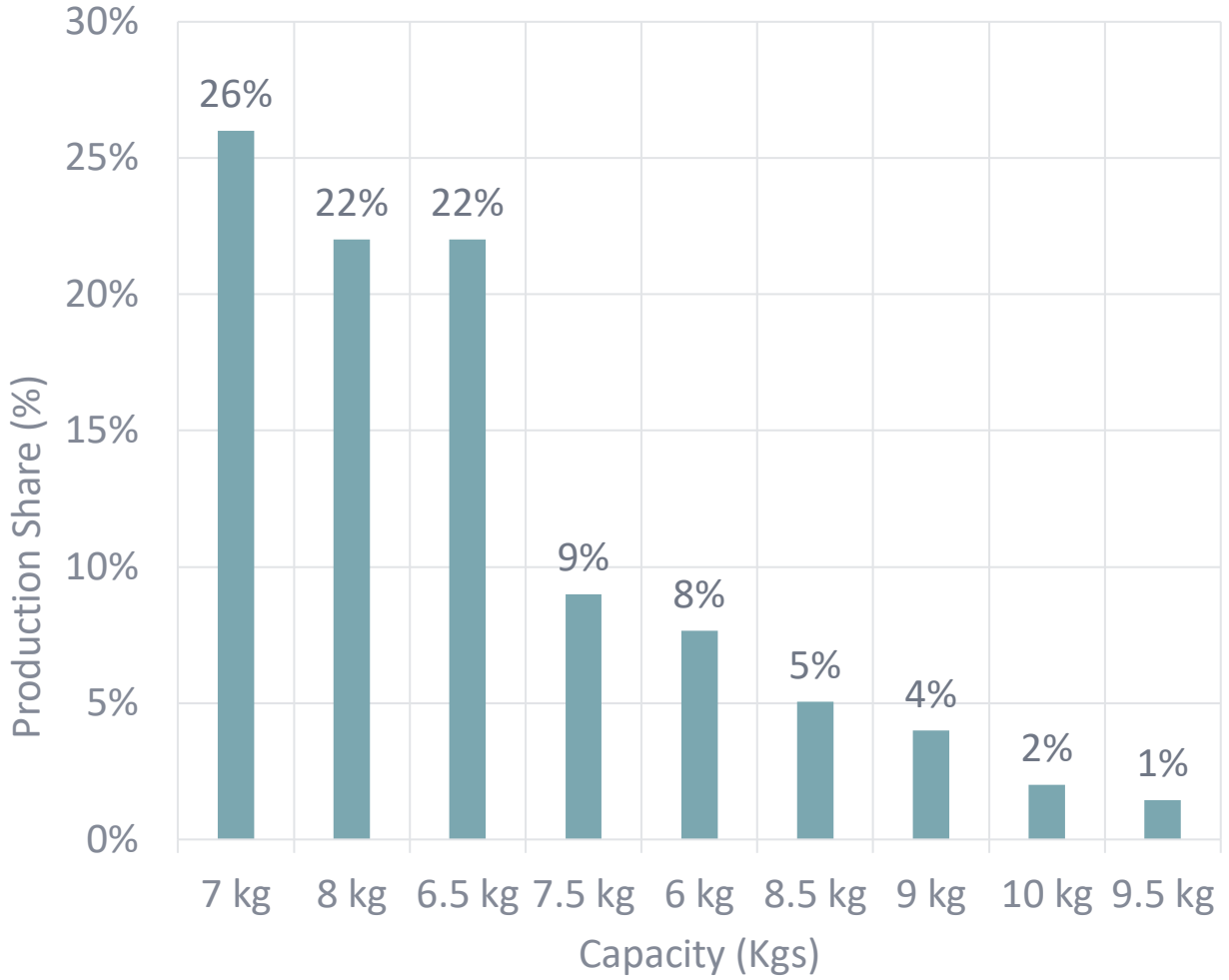
Type-wise Market Segmentation from 2012-17





- In 2012, Semi automatic category has dominated the market with share of 59%, followed by Top Load with 29% and Front load with 12%. Over the decade, the households preferred to use full automatic segment to reduce daily chores and increased the market of Top Load with share 52%, followed by front load with 19%, and Semi automatic market got reduced to 30%.

Capacity-wise production share (2020-21)



- In 2020-21, the market share is dominated by 7kg washing machine capacity with 26% as it is **considered ideal for families with 3-5 members.**
- Other Capacities such as 8kg and 6.5kg has market share of 22%.

India Washing Machine Labeling program

Scope of Washing Machine Program

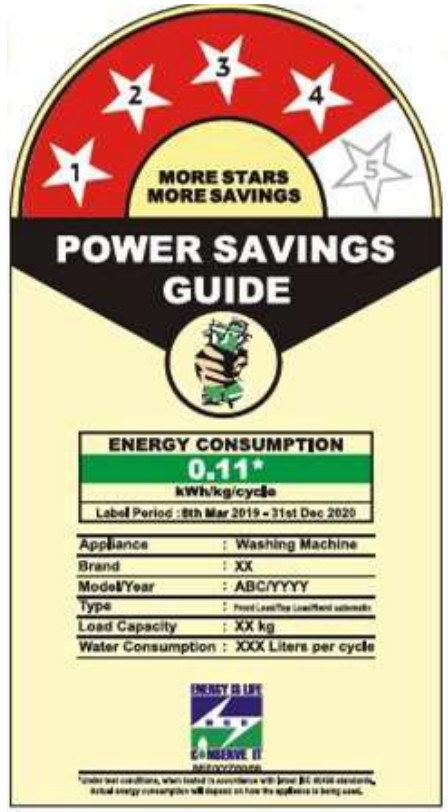
- The program specifies the requirement for participating in the energy labeling program for all types of washing machines covered under the scope of IEC 60456 and IS 302-2-7 meant for household and similar use, being manufactured, imported and sold in India.

- **Star Rating Table Validity :** 08 March 2019 to 31 December 2022

- **Star Rating Table for** Semi automatic, Top loader and Front Loader

Front loaders (drum type)-Cotton 60◦C	
Star rating	**Energy consumption (E) per cycle (kWh/kg/cycle)**
1 Star	0.16 < E ≤ 0.18
2 Star	0.14 < E ≤ 0.16
3 Star	0.11 < E ≤ 0.14
4 Star	0.09 < E ≤ 0.11
5 Star	E ≤ 0.09

Top loaders and Semi-Automatic -Cotton 30◦C	
Star rating	**Energy consumption (E) per cycle (kWh/kg/cycle)**
1 Star	0.0171 < E ≤ 0.0185
2 Star	0.0158 < E ≤ 0.0171
3 Star	0.0145 < E ≤ 0.0158
4 Star	0.0132 < E ≤ 0.0145
5 Star	E ≤ 0.0132

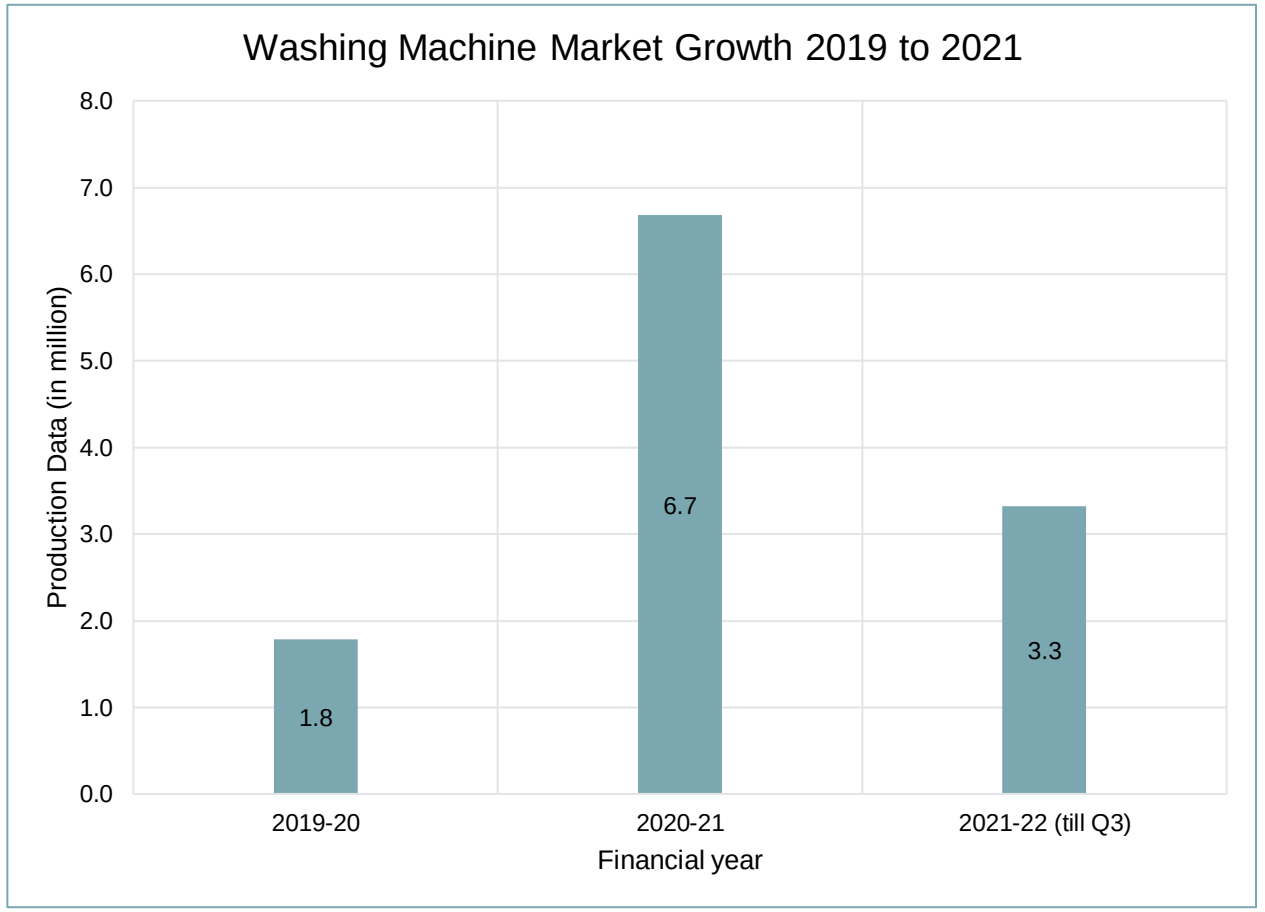


Sample Star Label

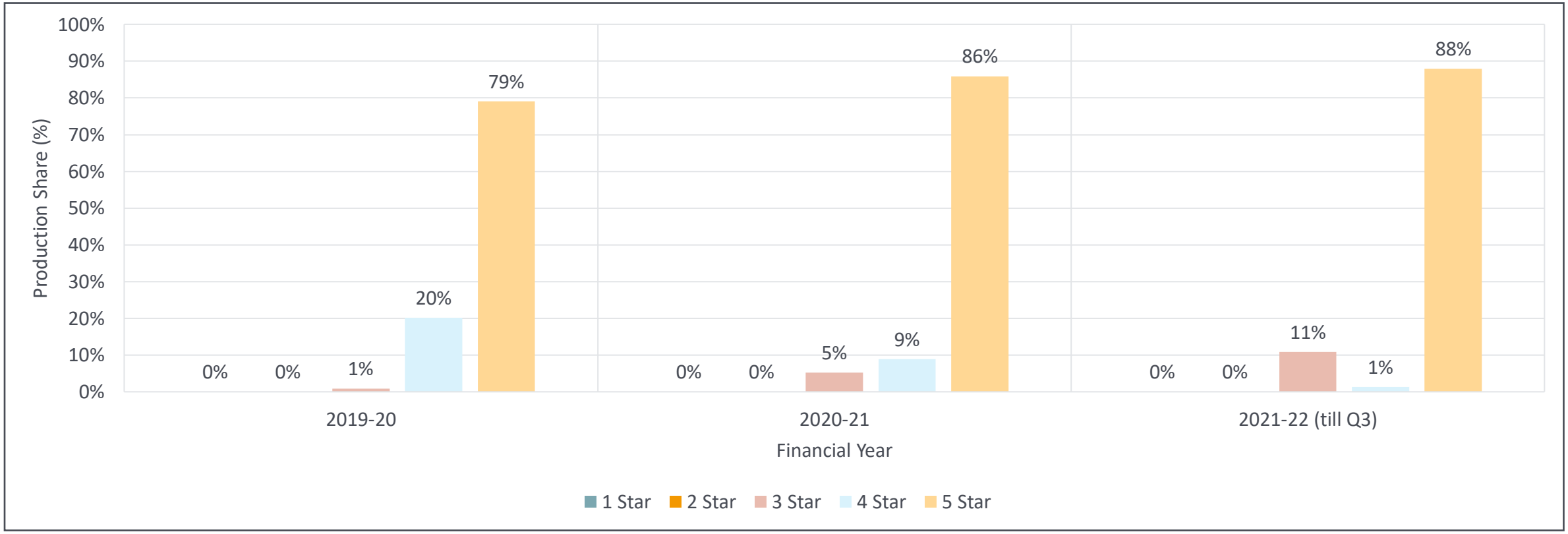
Registration under Voluntary program

Washing Machine-Labelled Production Data

- After relaunch of the program, in 2019 the overall labelled product is 1.8 Million.
- In 2020, market share of labelled product was the highest with 6.7 million.
- Since the launching of the washing machine labelling program, looking at the BEE production data, it is anticipated that the majority of the market covered under the voluntary program.



Star Rating-wise Production data (2019-2022)



- From 2019 - 2022, 5 star rated washing machine dominate the market by 80% share, followed by 4 star and 3 star with minimal market share.
- The market share for 1-star and 2-star rated are nil.

Recommendations

- Present Star rating table for Washing Machine is valid till 31st December 2022 under Voluntary Program.

- Based on detailed analysis, CLASP proposes the following based on the success of **star labeling program which transformed market towards higher energy efficiency.**

1) Upgrade two-levels in Star Rating table looking at share of 5-star penetration.

2) Make Washing Machine program mandatory with effective from 1st January 2023 till 31st December 2025.

- By Mandating the program, the product can save cumulative electricity savings of **2.8 Terawatt-hours and reduce GHG emissions by 2.3 million tons by 2030**.

Thank you!

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