

## Supplementary Data

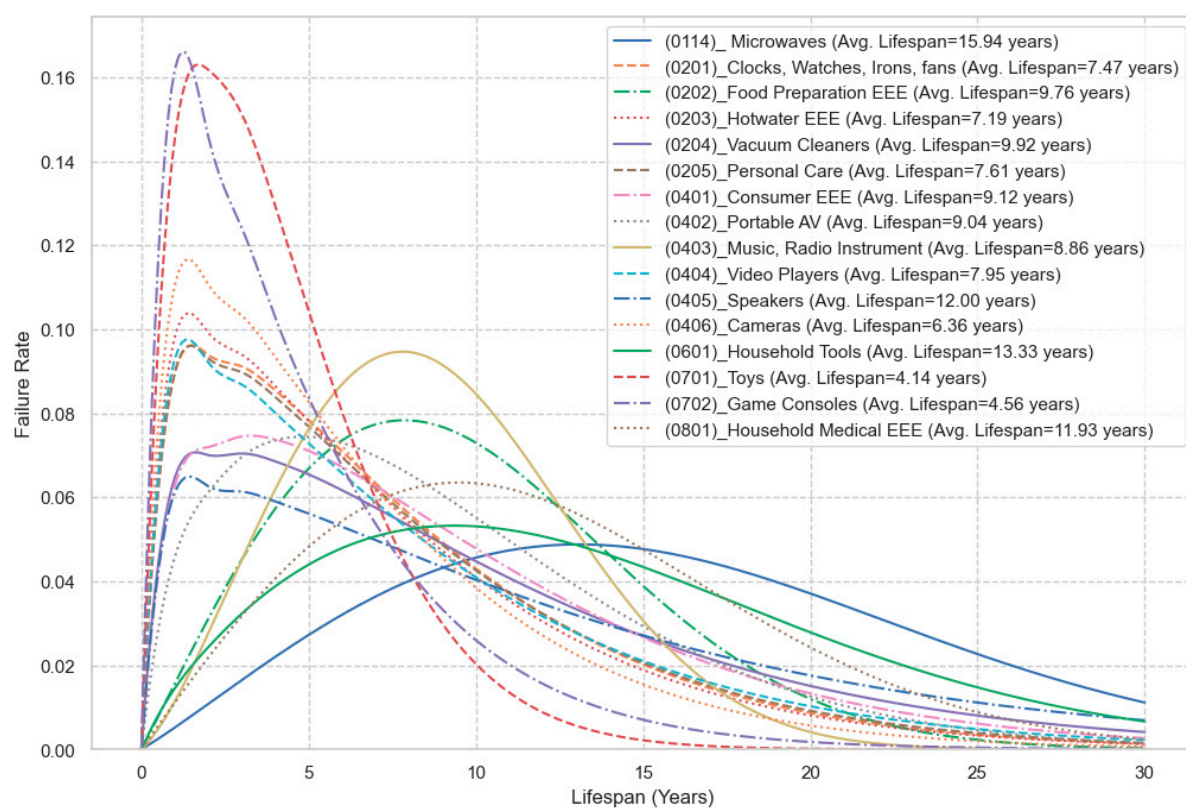


Figure S1: Failure Rates of small EEE

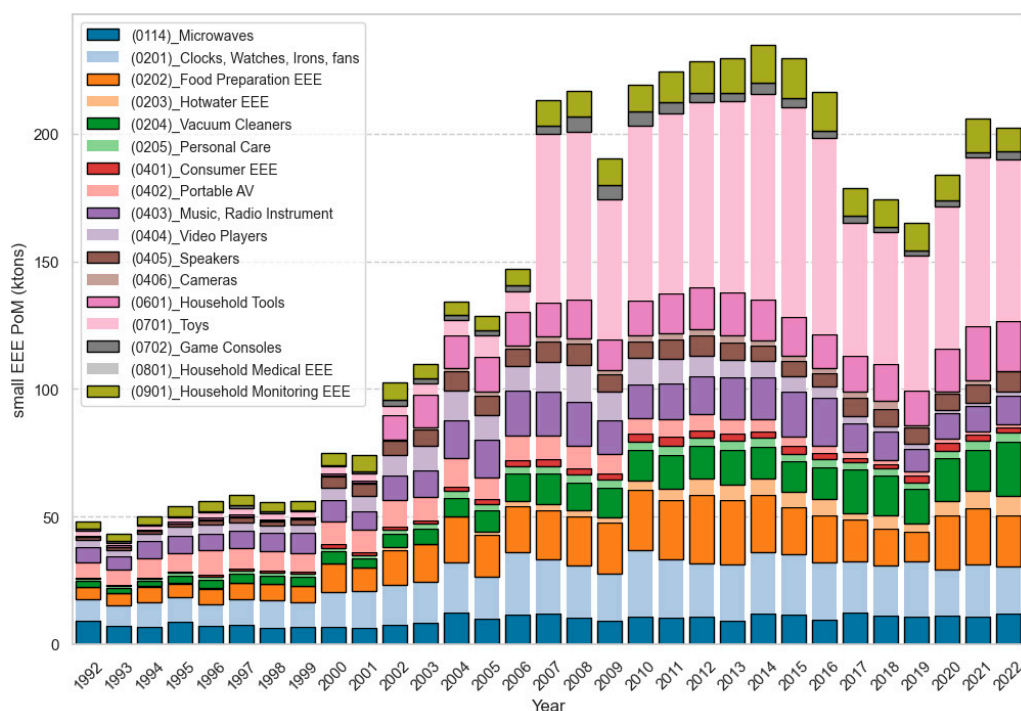


Figure S2: Imports and exports for small EEE

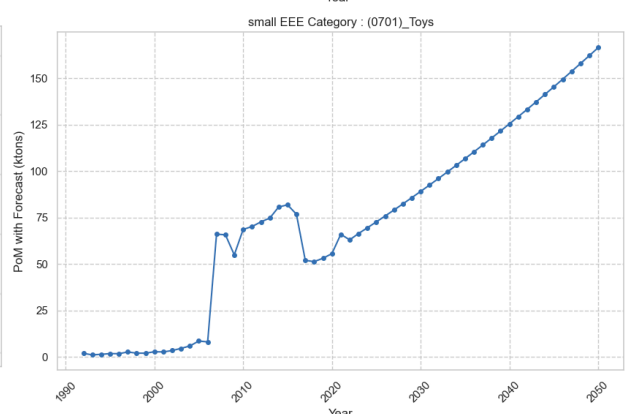
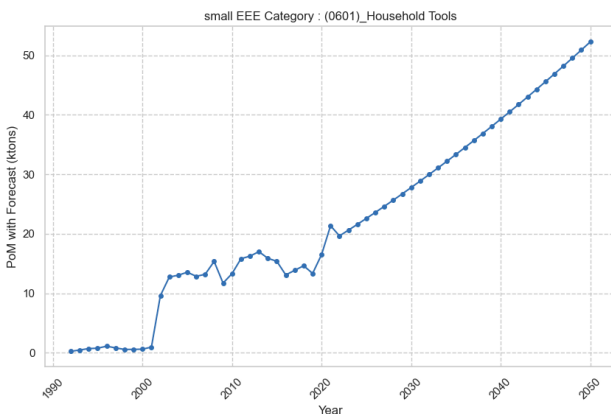
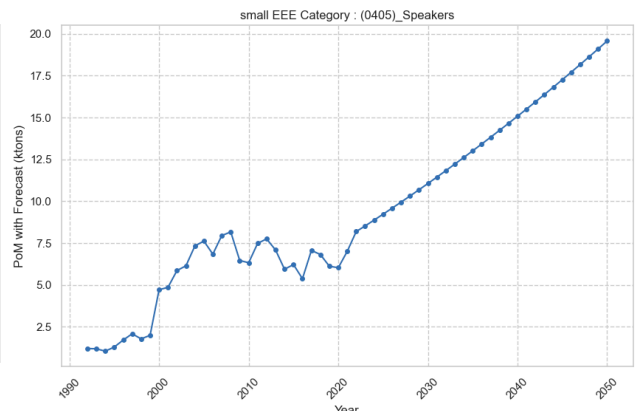
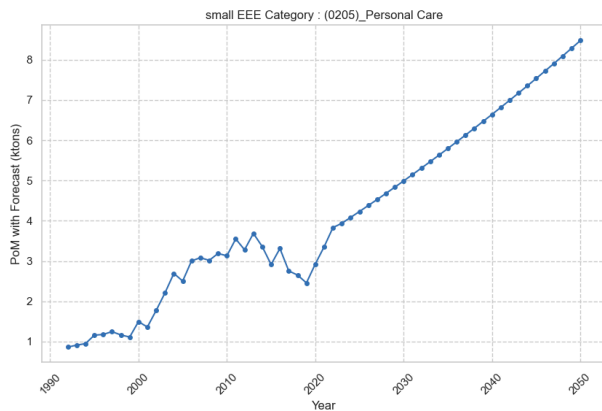
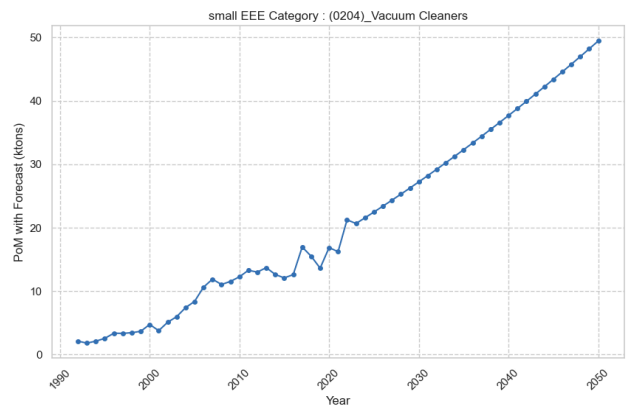
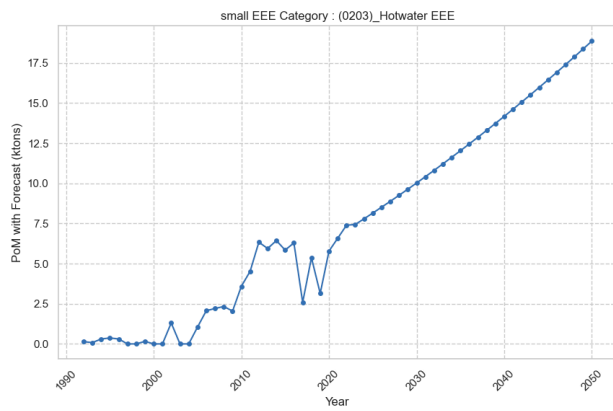
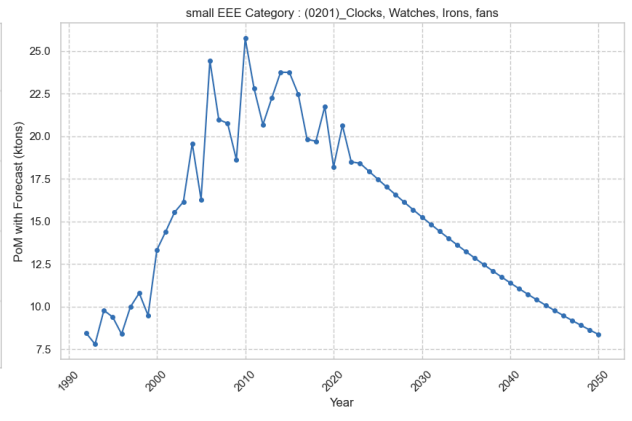
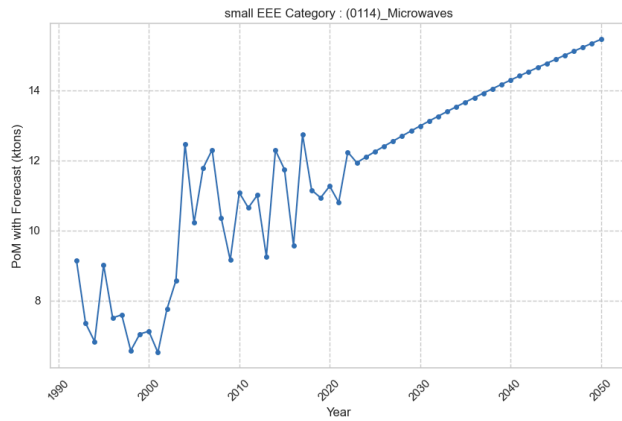


Figure S3: Sample PoM small EEE Forecasts

## PoM small EEE Forecast

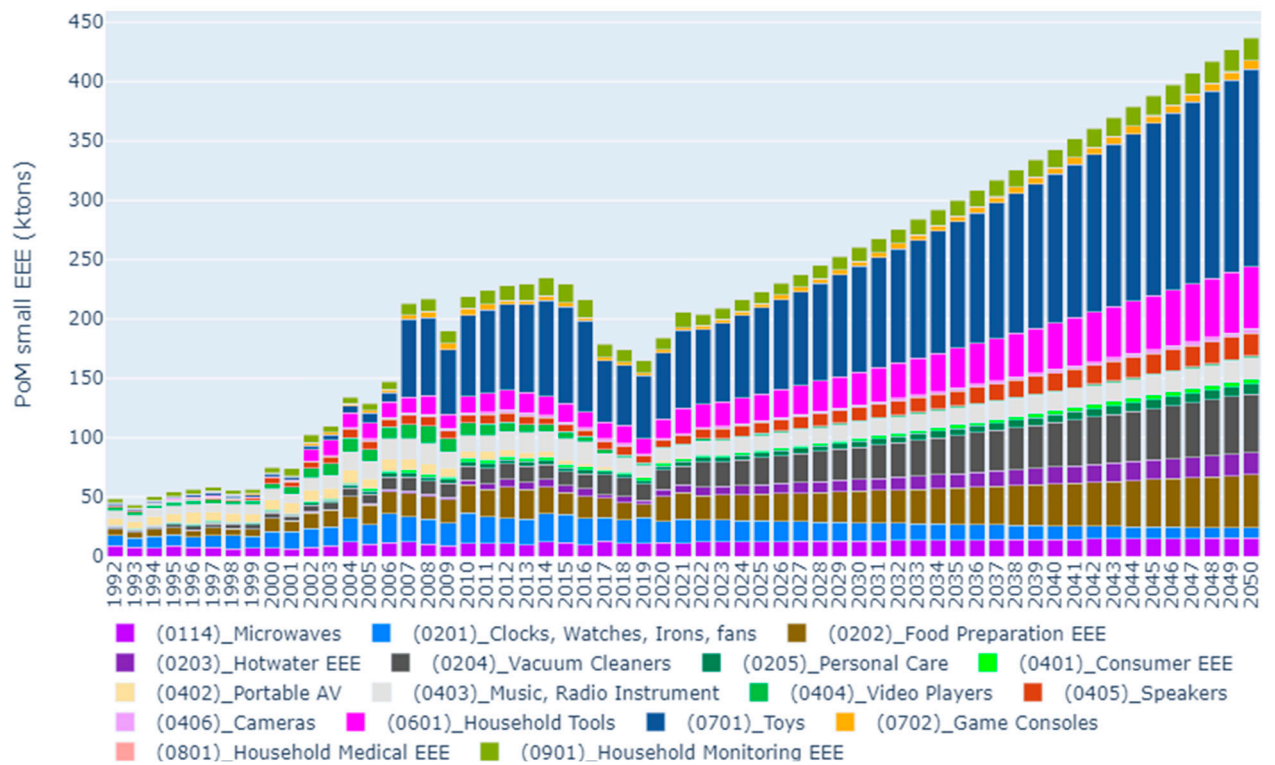


Figure S4: PoM small EEE (ktons)

## Material Quantities

Table S1: Material Quantity and Prices

Key	Fe%	Cu%	Al%	Plastic%	Ag%	Au%	Other%
(0114)_Microwaves	74.4	2.3	2.6	5.9	0.005	0.0025	14.7925
(0201)_Clocks, Watches, Irons, fans	53.65	4.75	6.7	30.6	0.005	0.0025	4.2925
(0202)_Food Preparation EEE	39.84	7.98	10.16	39.68	0.005	0.0025	2.3325
(0203)_Hotwater EEE	27.65	5	5.35	60	0.005	0.0025	1.9925
(0204)_Vacuum Cleaners	21.5	6	0.95	60.9	0.005	0.0025	10.6425
(0205)_Personal Care	25.8	13.05	0.3	55.2	0.005	0.0025	5.6425
(0401)_Consumer EEE	42.5	4	0	38.4	0.005	0.0025	15.0925
(0402)_Portable AV	60.15	1.7	4.75	17.4	0.005	0.0025	15.9925
(0403)_Music, Radio Instrument	22.4	0.4	0	75.5	0.005	0.0025	1.6925
(0404)_Video Players	60.15	1.7	4.75	17.4	0.005	0.0025	15.9925
(0405)_Speakers	30.4	6.2	1.8	59	0.005	0.0025	2.5925
(0406)_Cameras	43	1	3	28	0.005	0.0025	24.9925
(0601)_Household Tools	33.3	8.0667	0.4333	43.1667	0.005	0.0025	15.0258
(0701)_Toys	9.99	2.13	1.86	69.82	0.005	0.0025	16.1925
(0702)_Game Consoles	29.1	6.9	7	52.2	0.005	0.0025	4.7925

(0801)_Household Medical EEE	29.1	6.9	7	52.2	0.005	0.0025	4.7925
(0901)_Household Monitoring EEE	29.1	6.9	7	52.2	0.005	0.0025	4.7925
Market_Price_2021 AUD/kg	0.19	10.3	2.62	1.95	1064	79335	0

(Adapted from (Islam & Huda, 2020; LifeCycles, 2021; Parajuly et al., 2017; Sam Haig, 2012))

## Results from the WGR Model

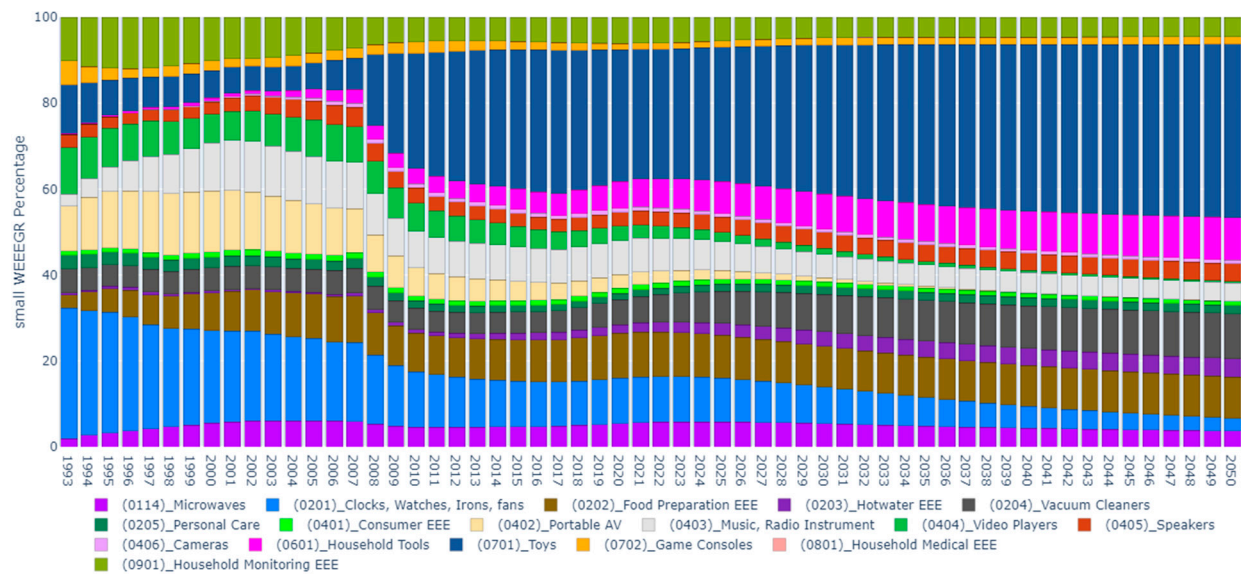


Figure S5: Percentage small WEEE (1992 – 2050)

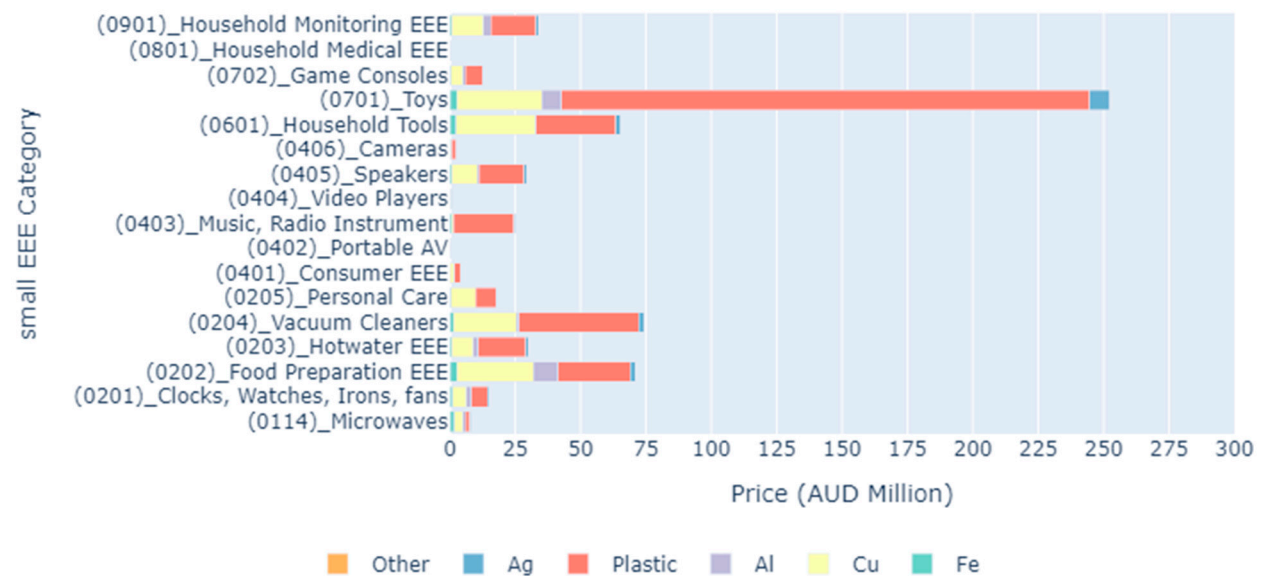


Figure S6: Forecasted revenue from recycling of small WEEE in 2050 – SCN1

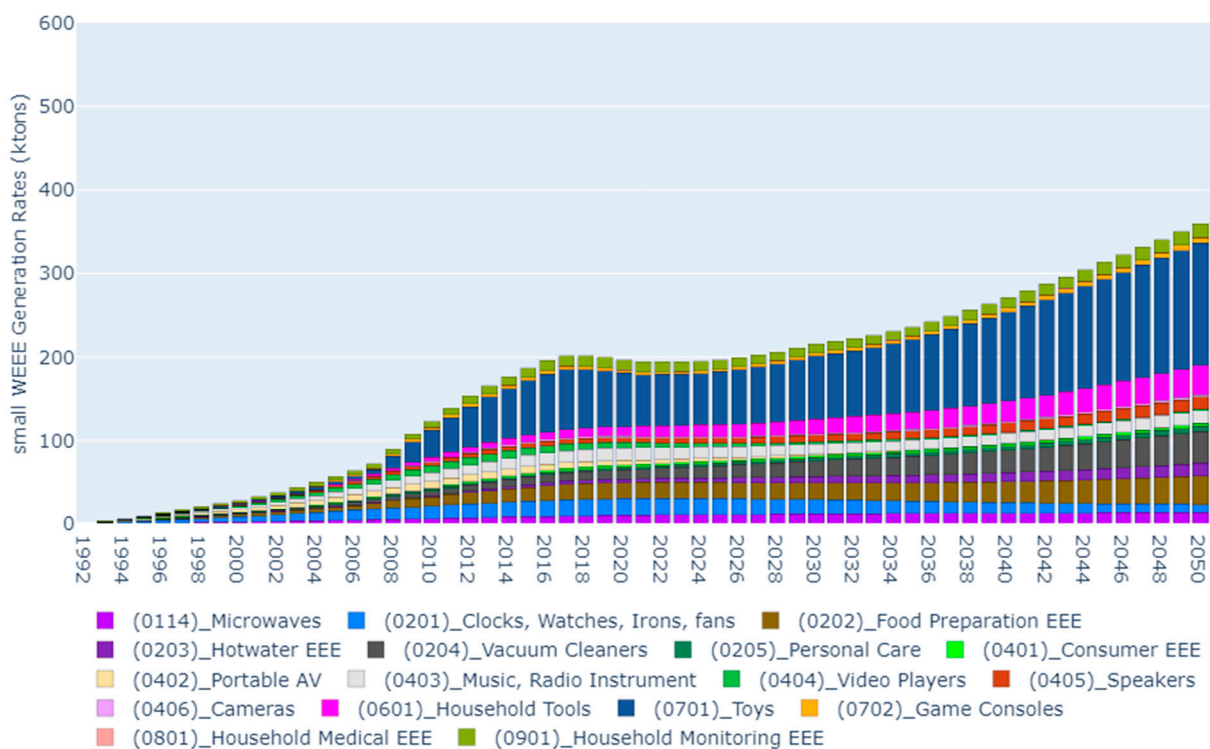


Figure S7: small WEEE Generation Rates in 2050 – SCN2

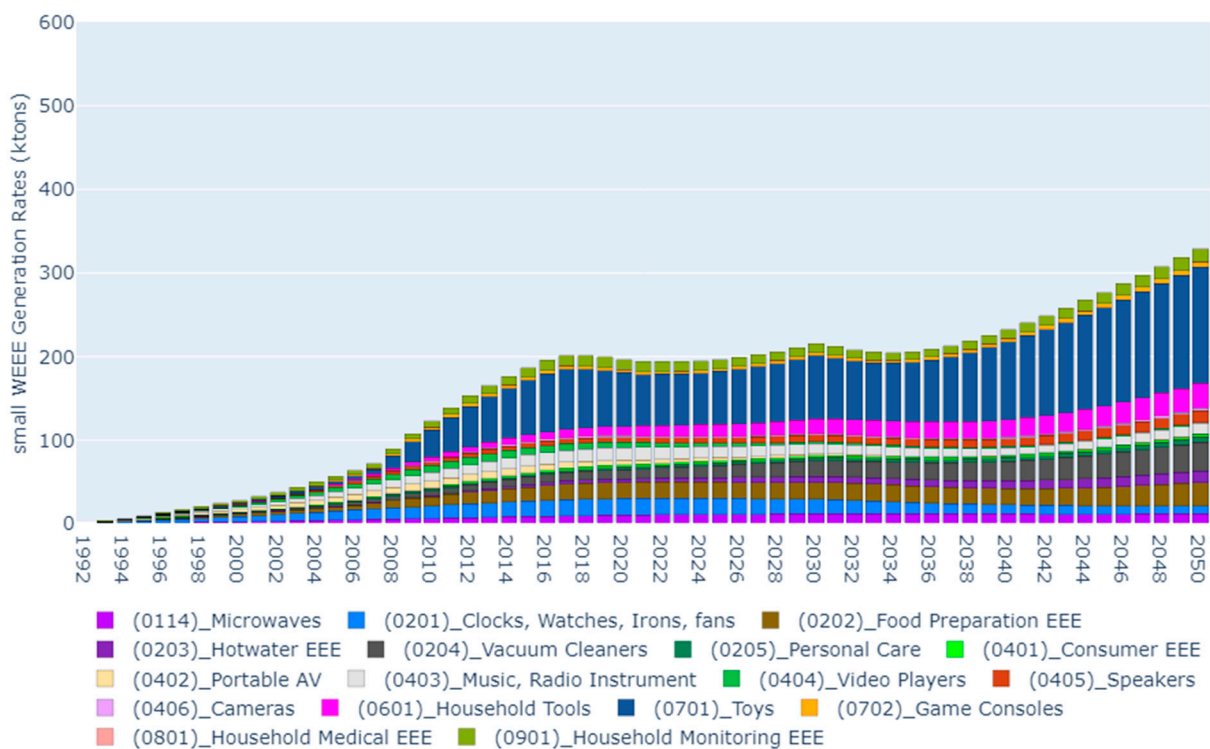


Figure S8: small WEEE Generation Rates in 2050 – SCN5



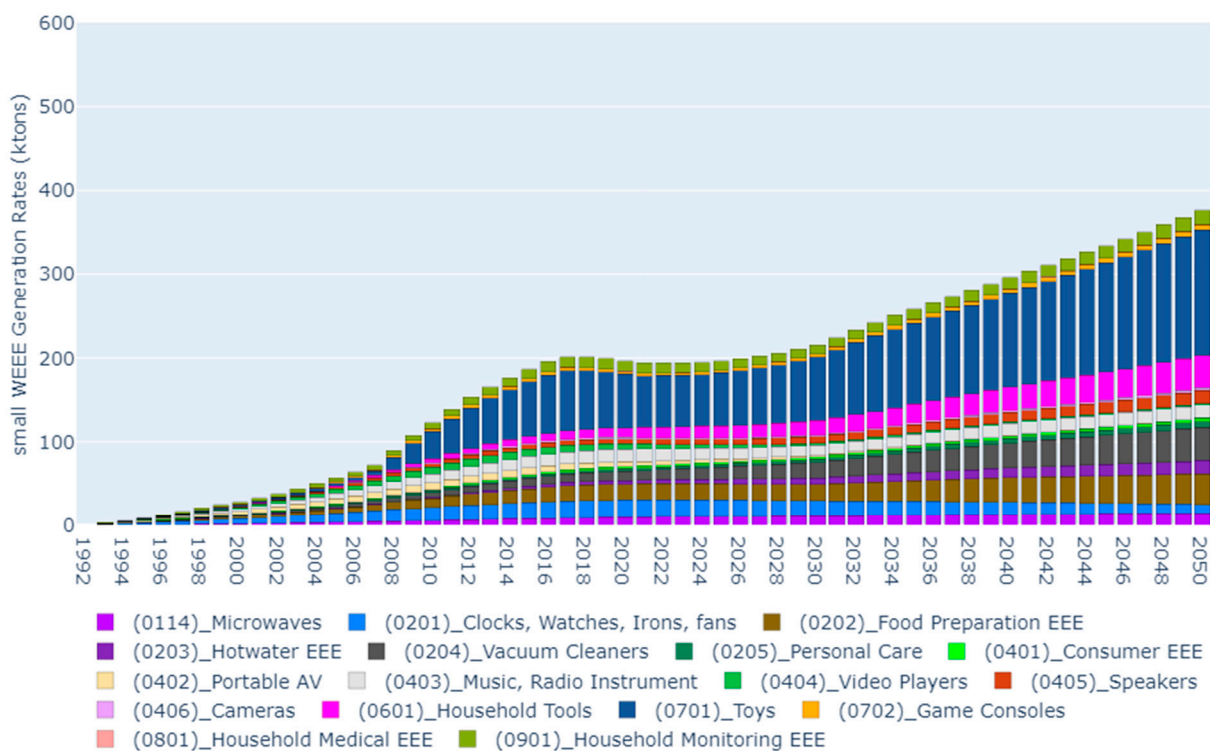


Figure S9: small WEEE Generation Rates in 2050 – SCN10

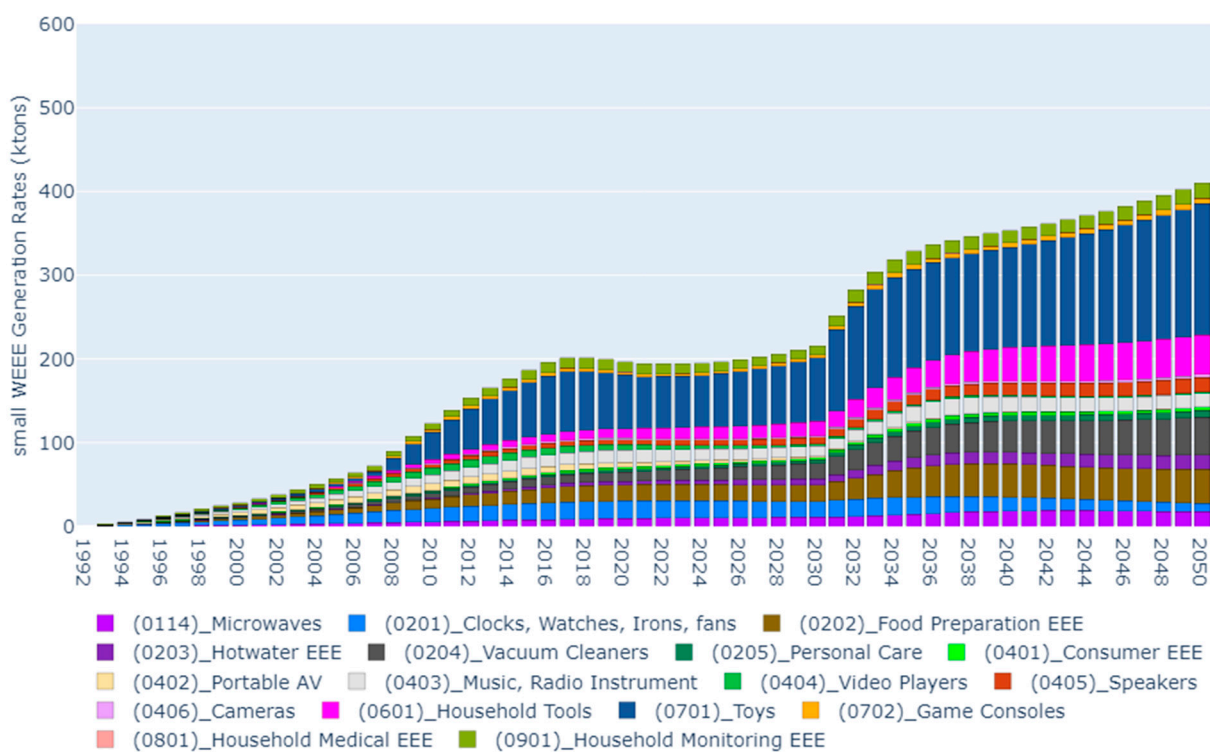


Figure S10: small WEEE Generation Rates in 2050 – SCN13

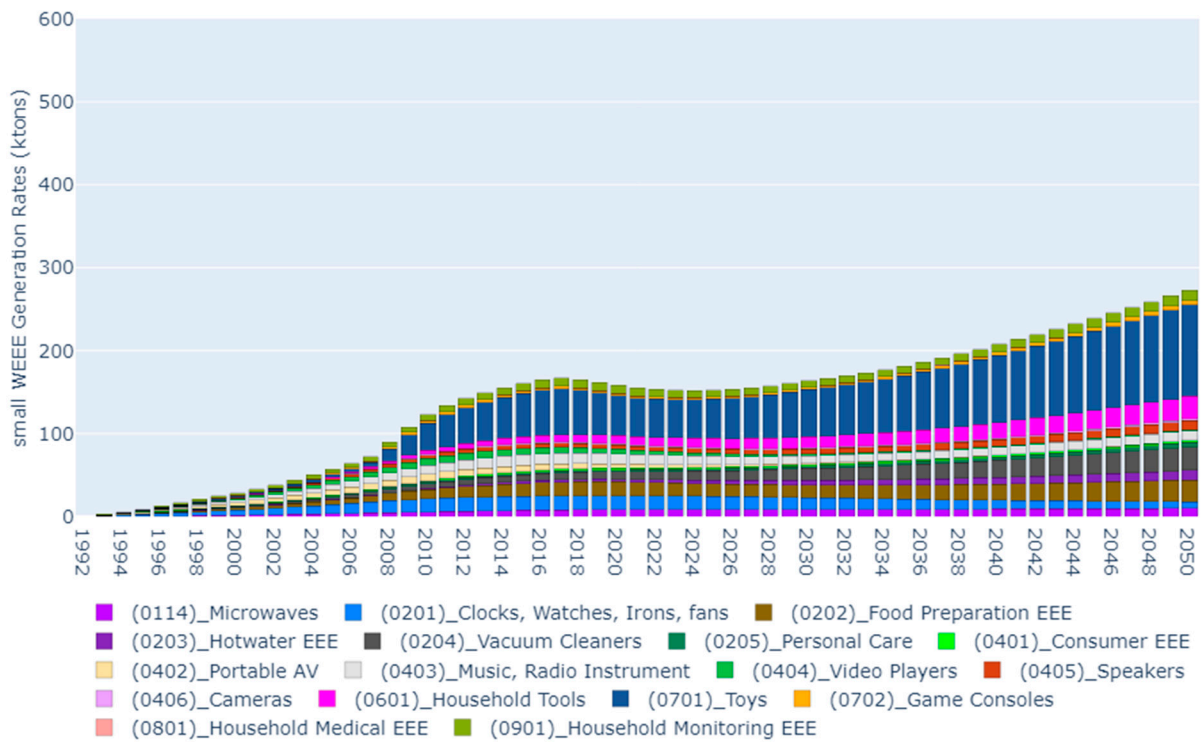


Figure S11: small WEEE Generation Rates in 2050 – SCN18

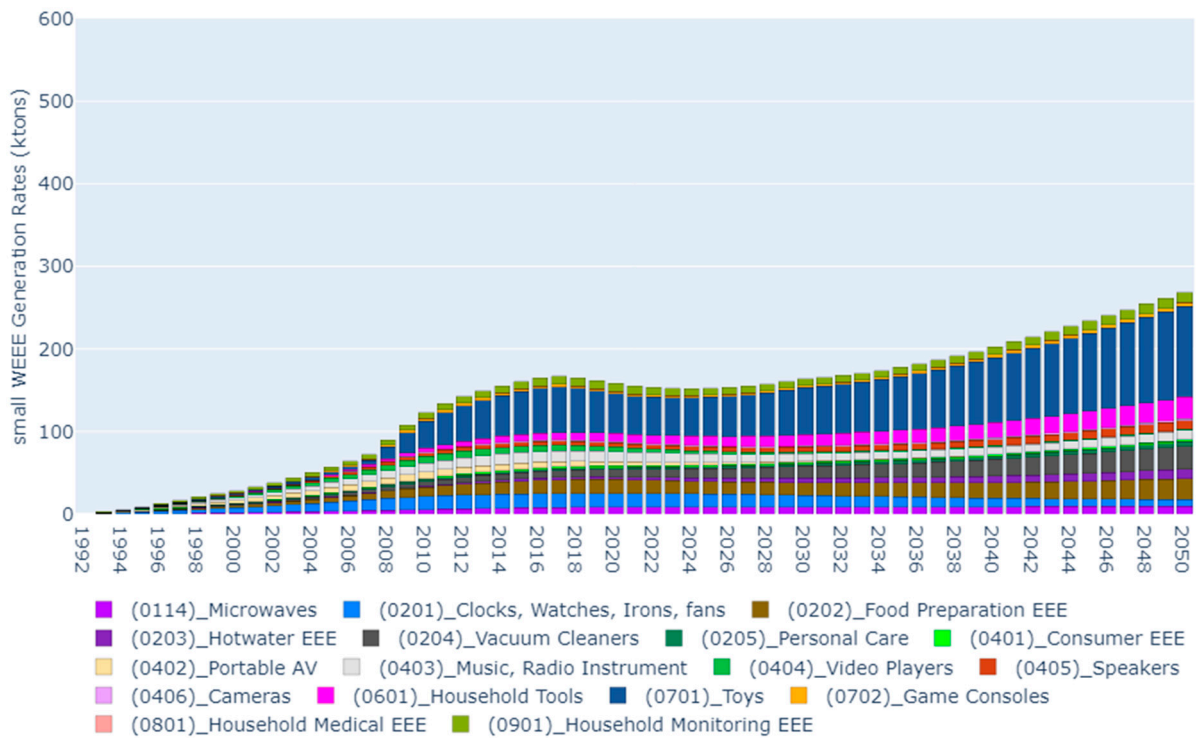


Figure S12: small WEEE Generation Rates in 2050 – SCN26



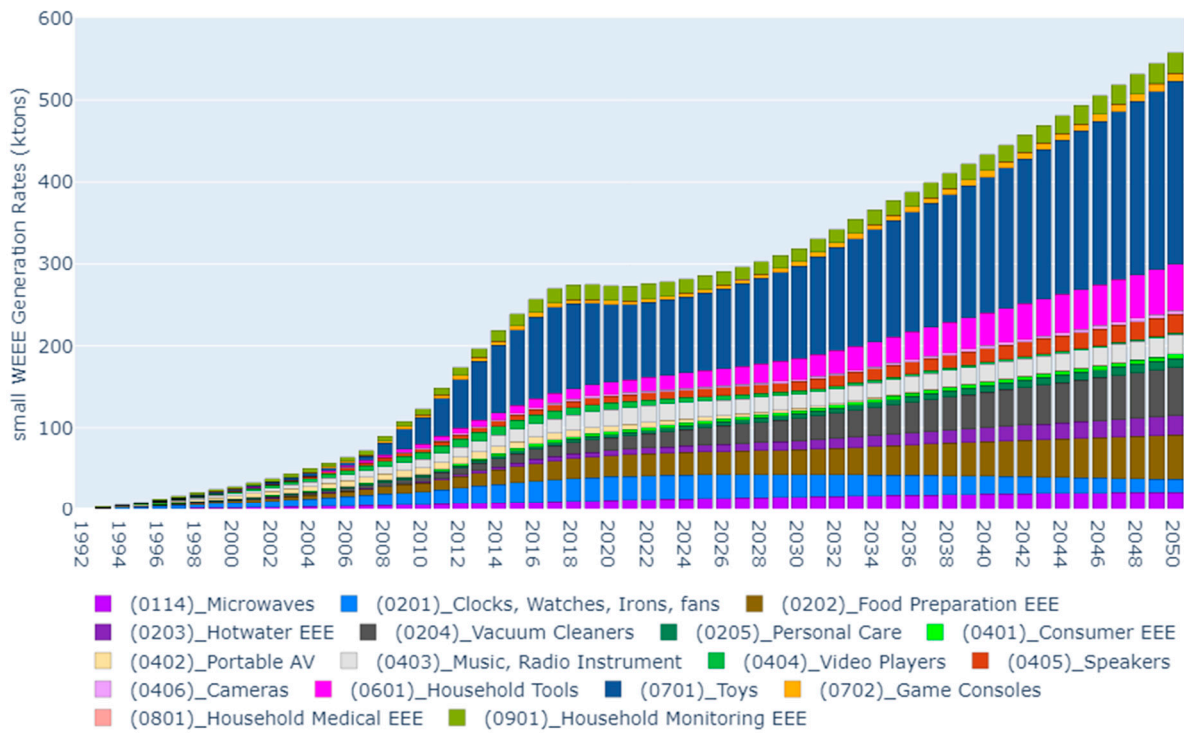


Figure S13: small WEEE Generation Rates in 2050 – SCN34

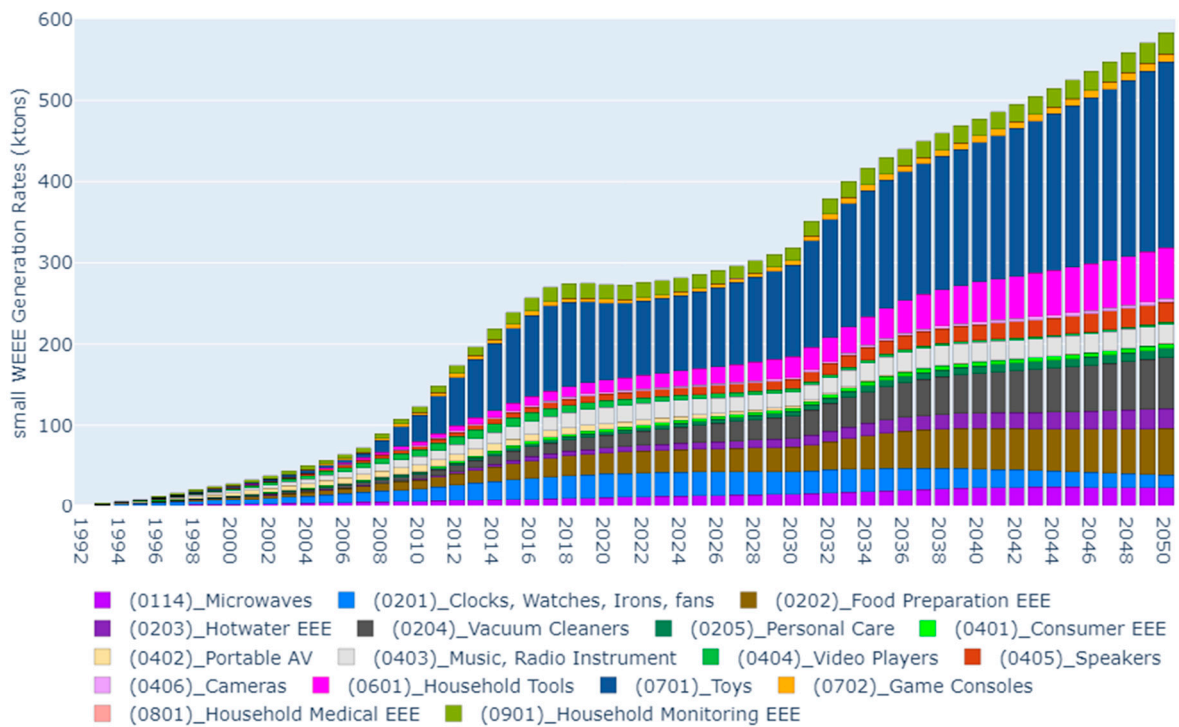


Figure S14: small WEEE Generation Rates in 2050 – SCN49

## References

- Islam, M. T., & Huda, N. (2020). Assessing the recycling potential of “unregulated” e-waste in Australia. *Resources, Conservation and Recycling*, 152, 104526. <https://doi.org/10.1016/j.resconrec.2019.104526>
- LifeCycles, I. (2021). *E-PRODUCT STEWARDSHIP IN AUSTRALIA*.
- Parajuly, K., Habib, K., & Liu, G. (2017). Waste electrical and electronic equipment (WEEE) in Denmark: Flows, quantities and management. *Resources, Conservation and Recycling*, 123, 85-92. <https://doi.org/10.1016/j.resconrec.2016.08.004>
- Sam Haig, L. M., Roger Morton and Simon Wilkinson. (2012). *Electrical product material composition*.