



In-depth review of the WEEE Collection Rates and Targets

in the EU-28, Norway,
Switzerland, and Iceland

Authors: C.P. Baldé, M. Wagner, G. Iattoni, R. Kuehr

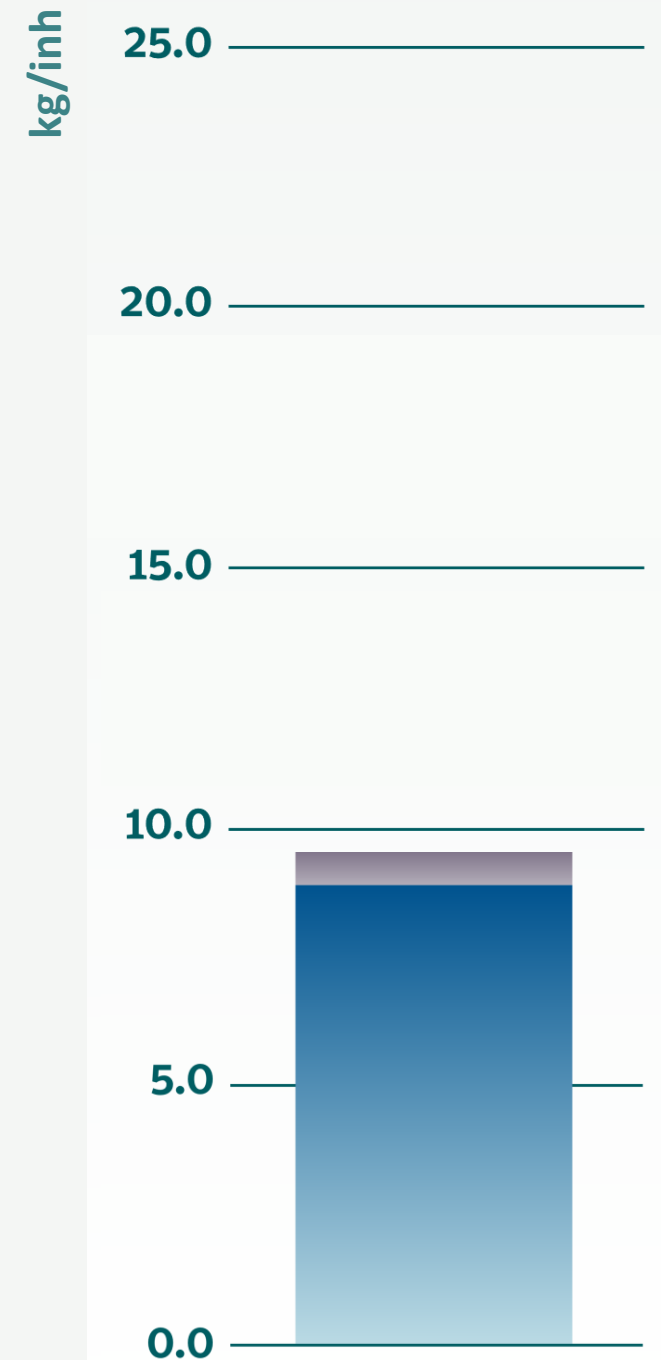
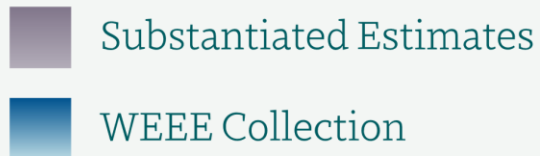
Study conducted by: United Nations University (UNU) / United Nations Institute for Training and Research (UNITAR) – co-hosting the SCYCLE Programme

1. Facts on WEEE collection
2. Positive impact
3. Negative impact
4. Sufficient for collection targets?
5. Impact of behavior
6. What is needed for future?

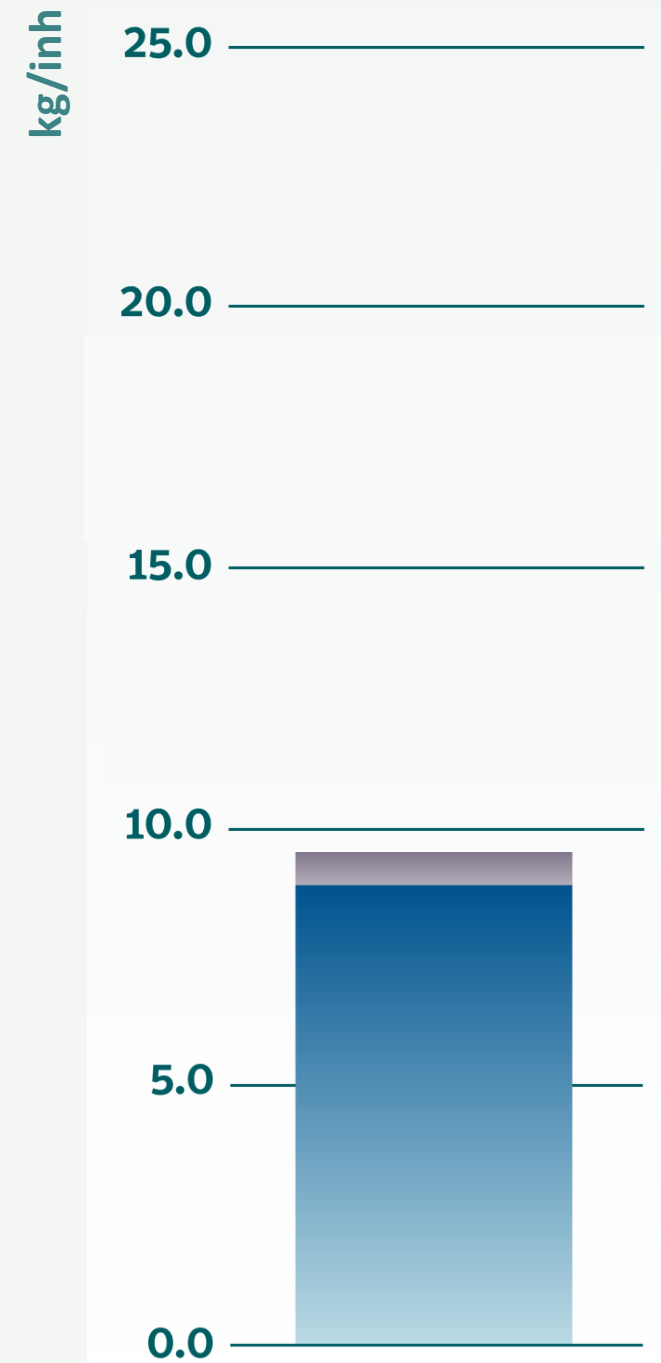


1. Facts on collection

55% of WEEE is collected and reported to WEEE Directive compared to WEEE Generated



2. Factors that positively impact WEEE Collection



2. Factors that positively impact WEEE Collection



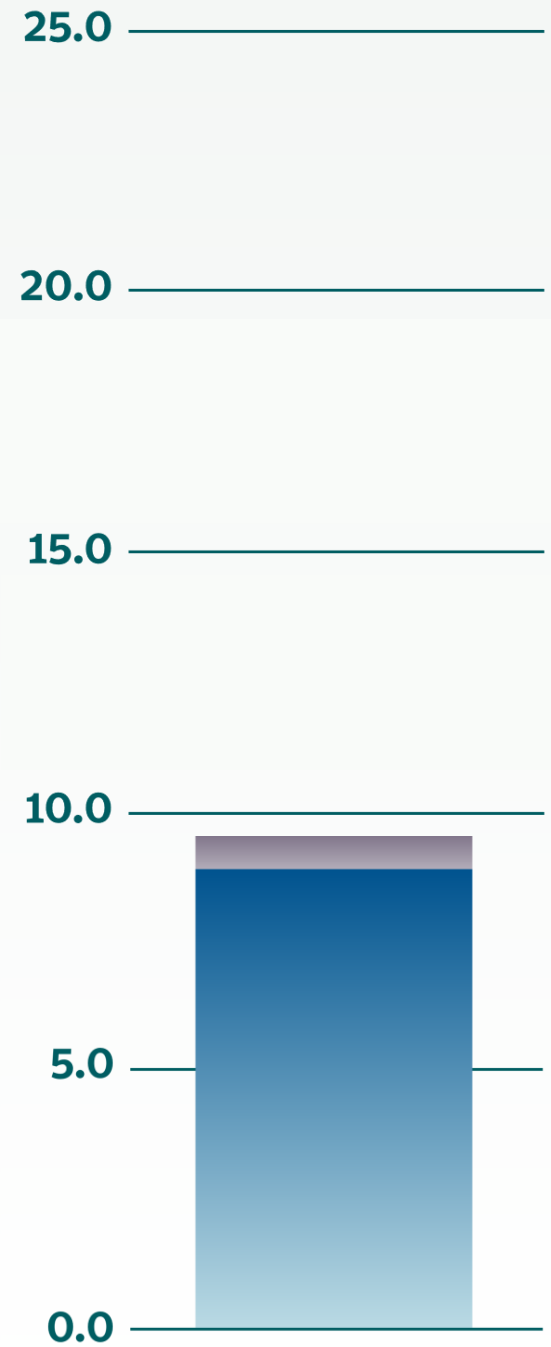
Positive impact
of 'all actors'
approach on
WEEE collection.



Positive impact
of mandatory
handover on
WEEE collection.

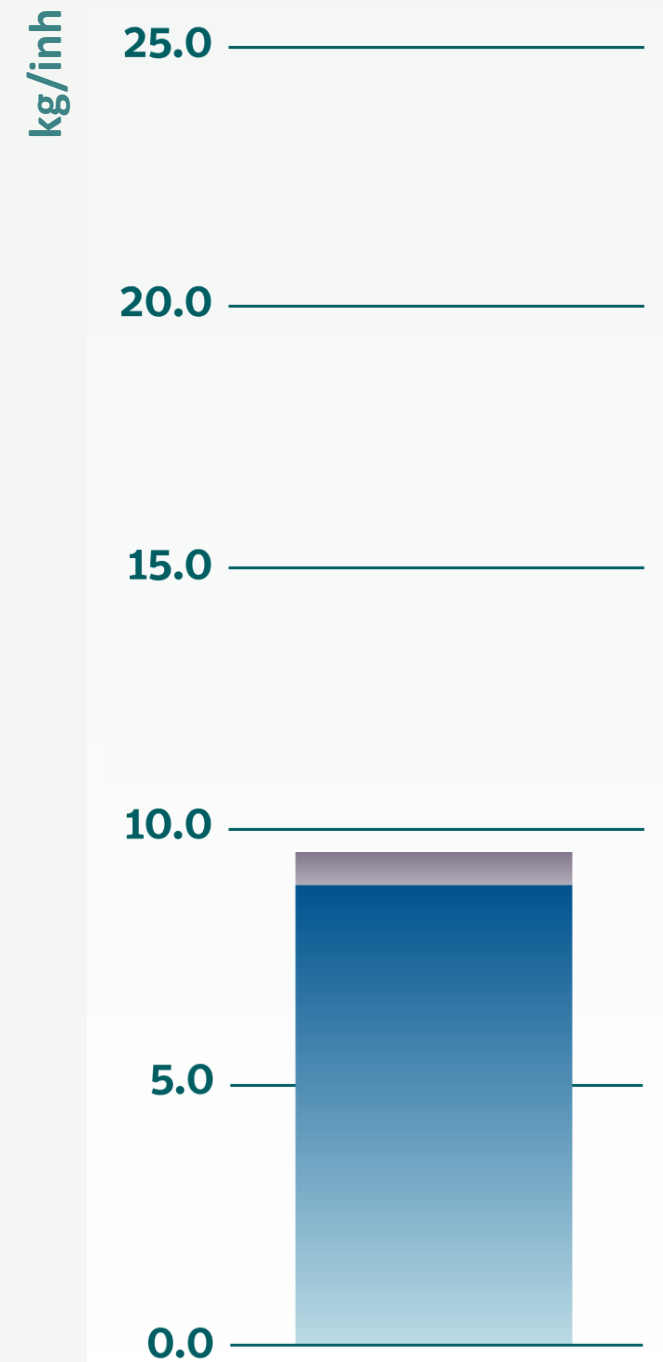


kg/inh

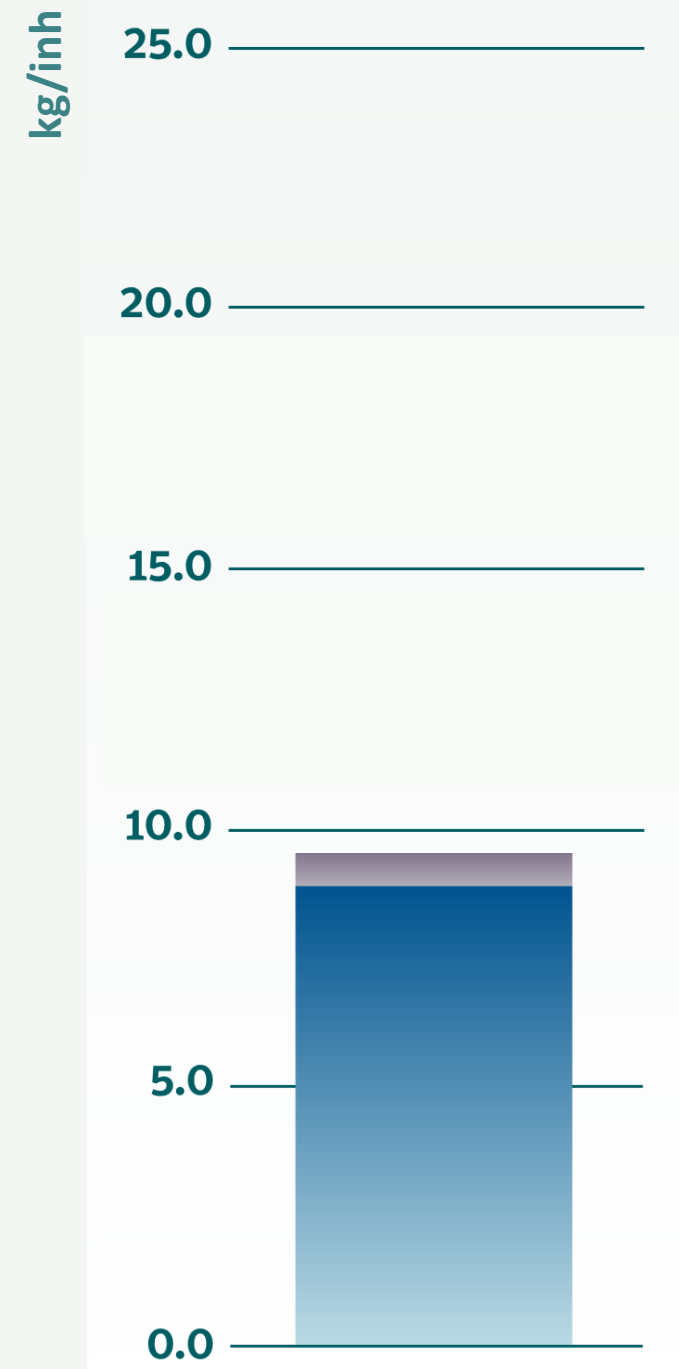
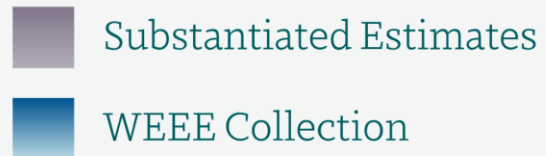


Recap

- Positive effect of 'all actors' approach and mandatory handover
- 55% is reported to be collected

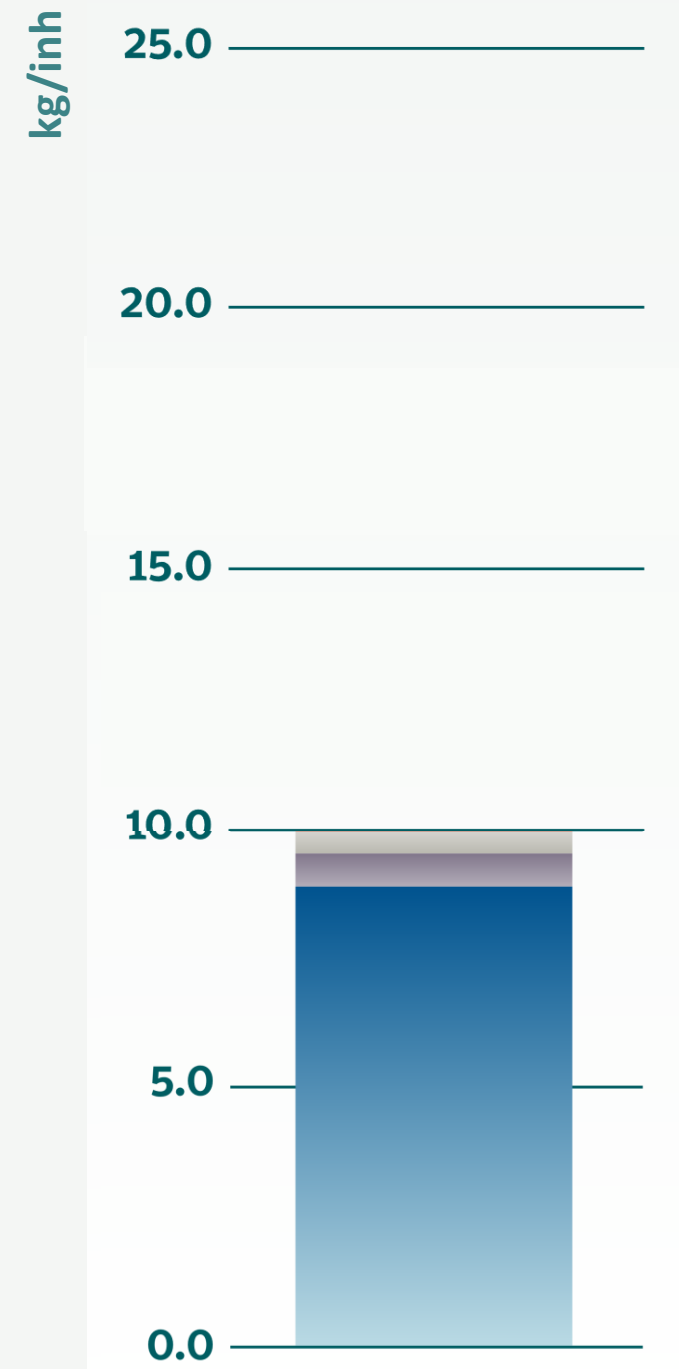


3. Factors that negatively impact WEEE Collection



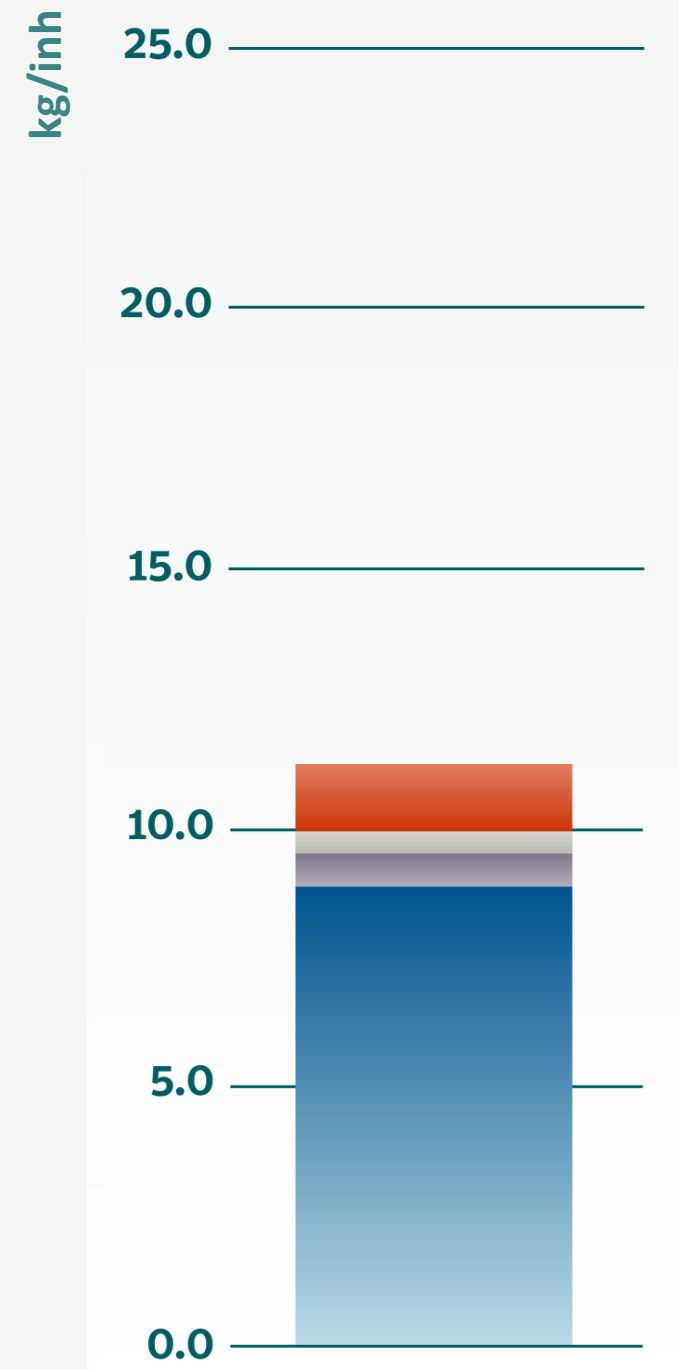
3. Factors that negatively impact WEEE Collection

- Exports for reuse
- Substantiated Estimates
- WEEE Collection



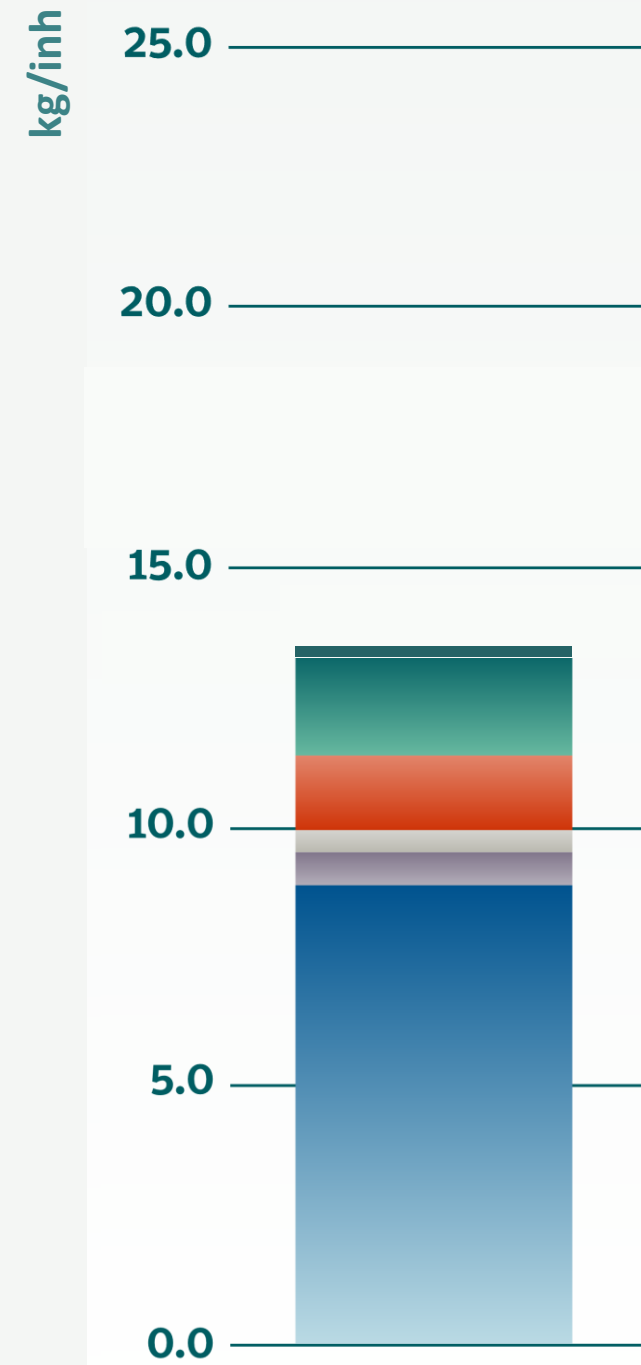
3. Factors that negatively impact WEEE Collection

- Waste Bin
- Exports for reuse
- Substantiated Estimates
- WEEE Collection



3. Factors that negatively impact WEEE Collection

- Metal scrap
- Waste Bin
- Exports for reuse
- Substantiated Estimates
- WEEE Collection



3. Factors that negatively impact WEEE Collection

kg/inh

25.0

20.0

15.0

10.0

5.0

0.0



Illegal exports of WEEE outside the EU



Metal scrap

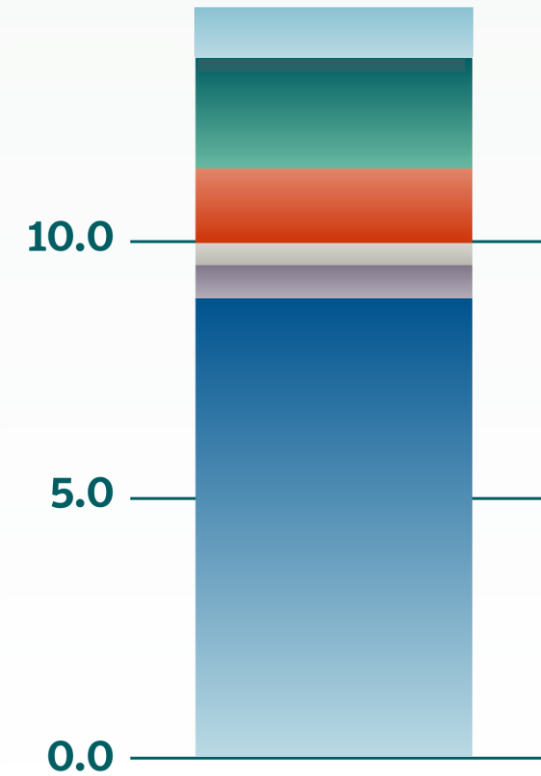


Exports for reuse



Waste bin

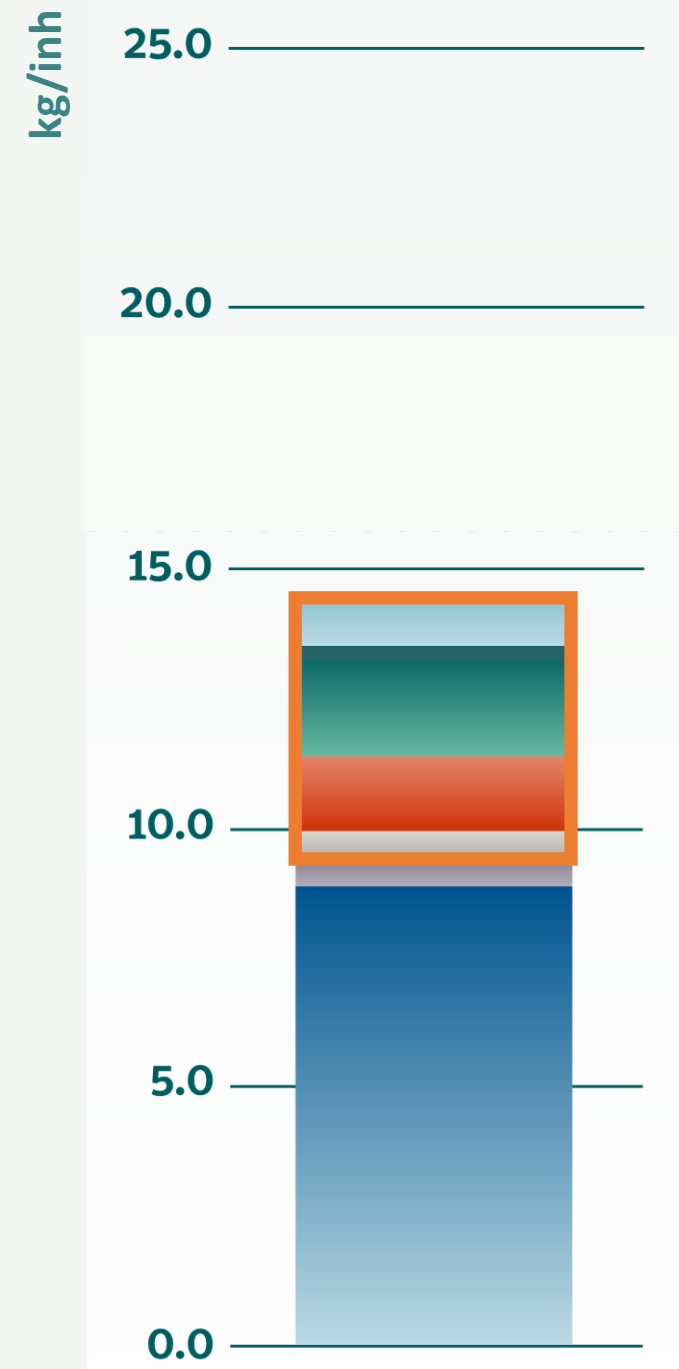
- Illegal Exports
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3. Factors that negatively impact WEEE Collection

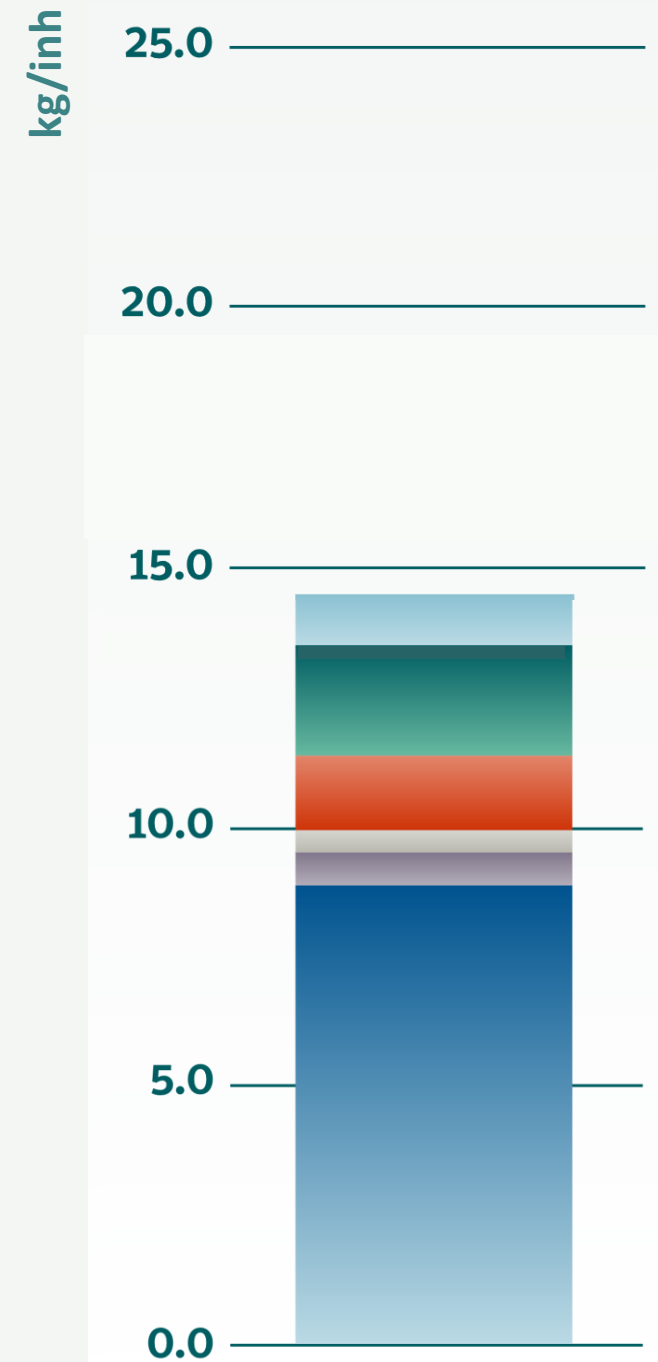
At least 20% of WEEE is in other flows

- Illegal Exports
- Metal scrap
- Waste Bin
- Exports for reuse
- Substantiated Estimates
- WEEE Collection



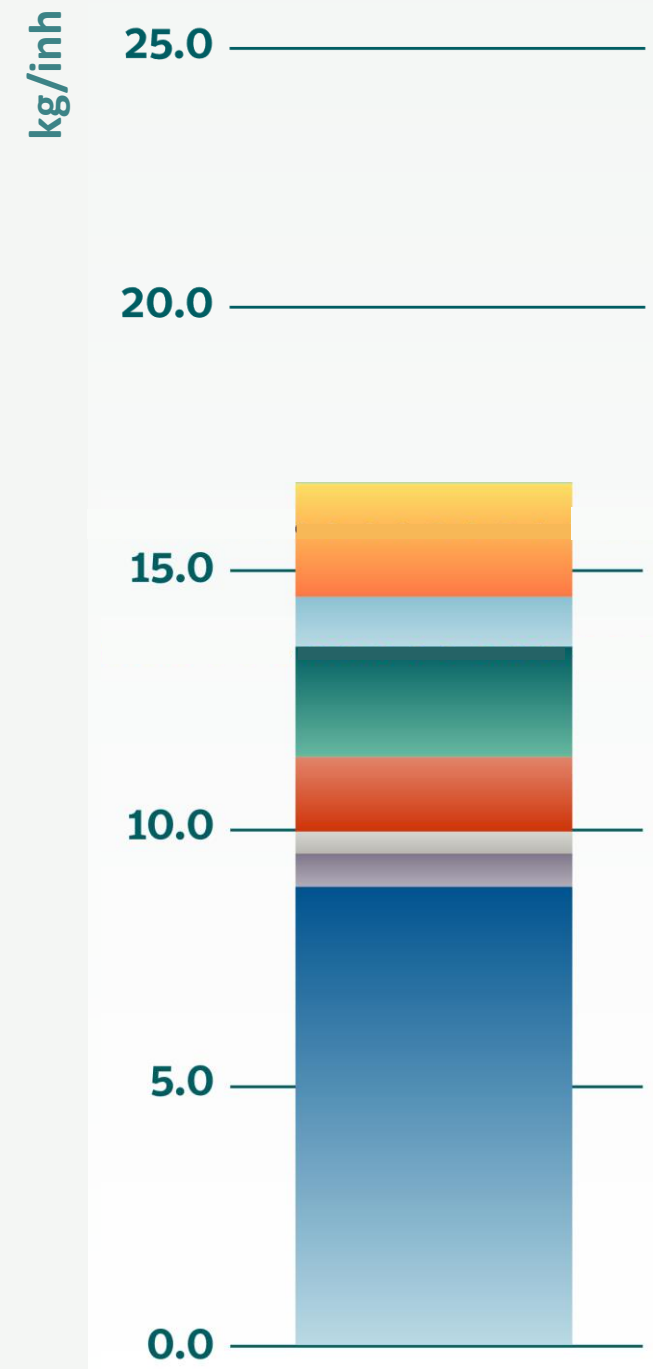
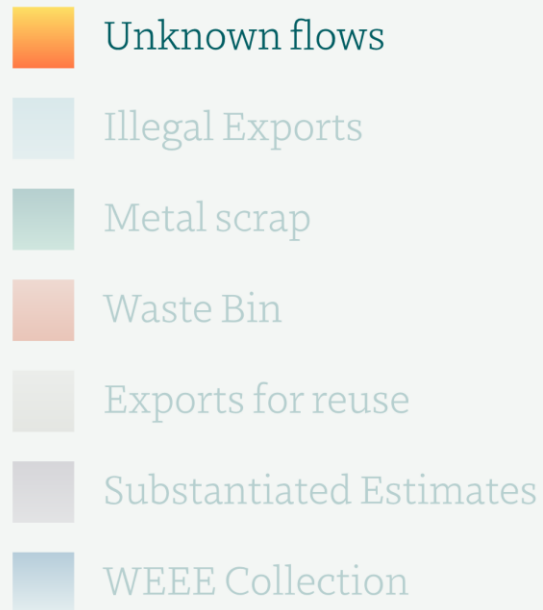
Recap

- Positive effect of 'all actors' approach and mandatory handover
- 55% is reported to be collected
- 20% in other WEEE flows



3. Factors that negatively impact WEEE Collection

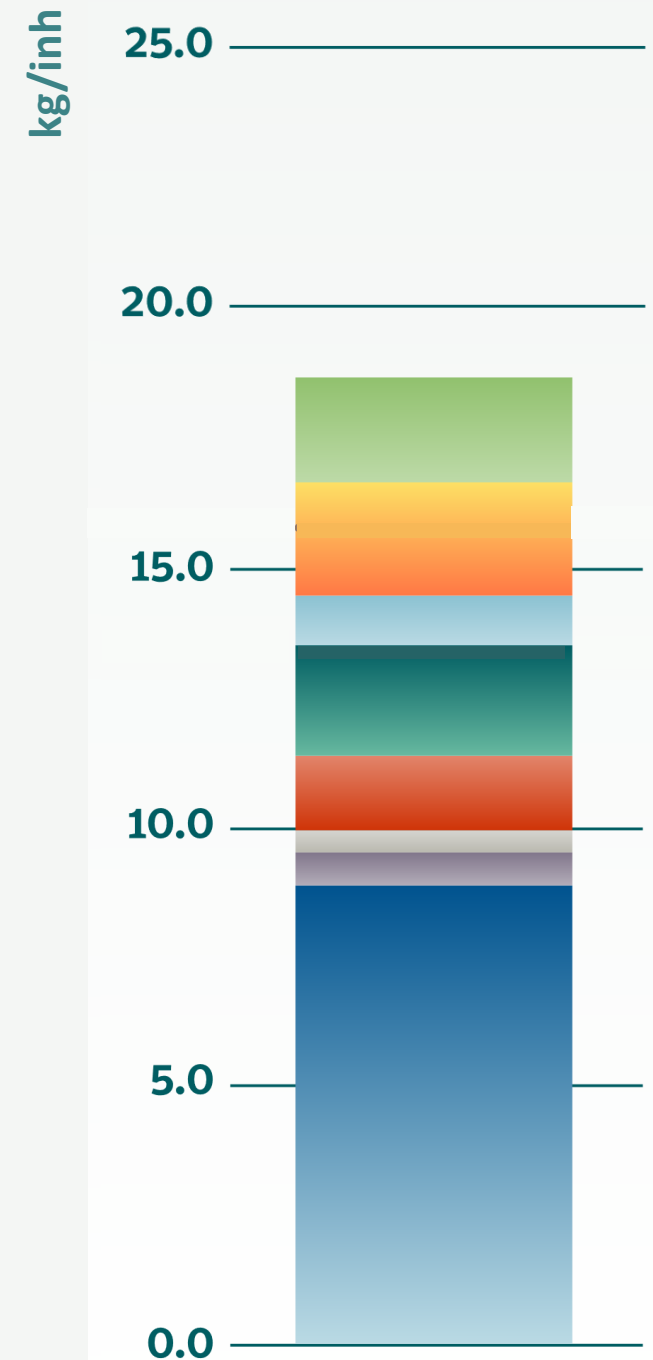
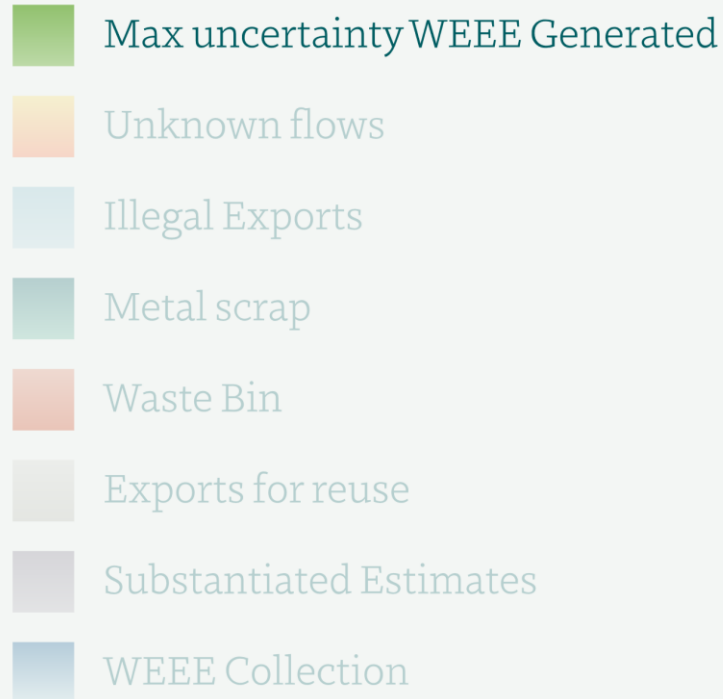
13% of WEEE is unmapped



3. Factors that negatively impact WEEE Collection

13% of WEEE is unmapped

Around 12 % of WEEE is unmapped, or uncertainty in WEEE Generated calculation

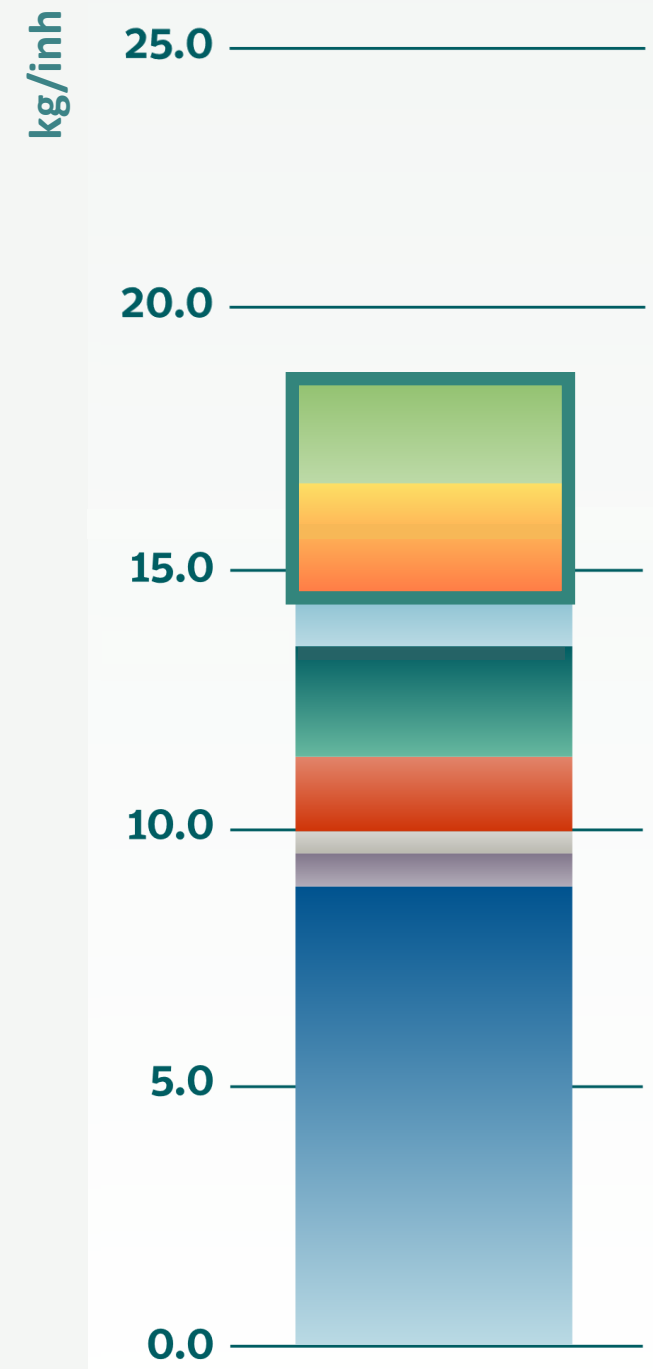
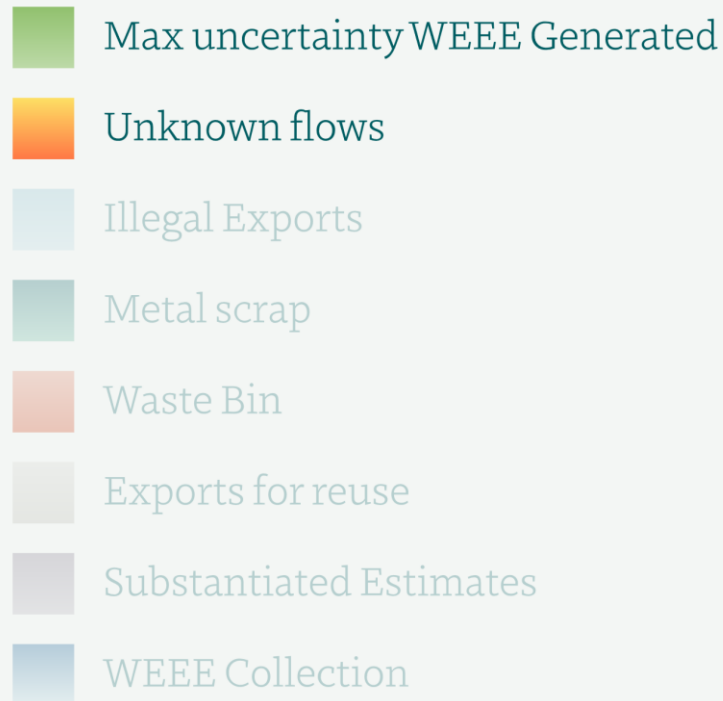


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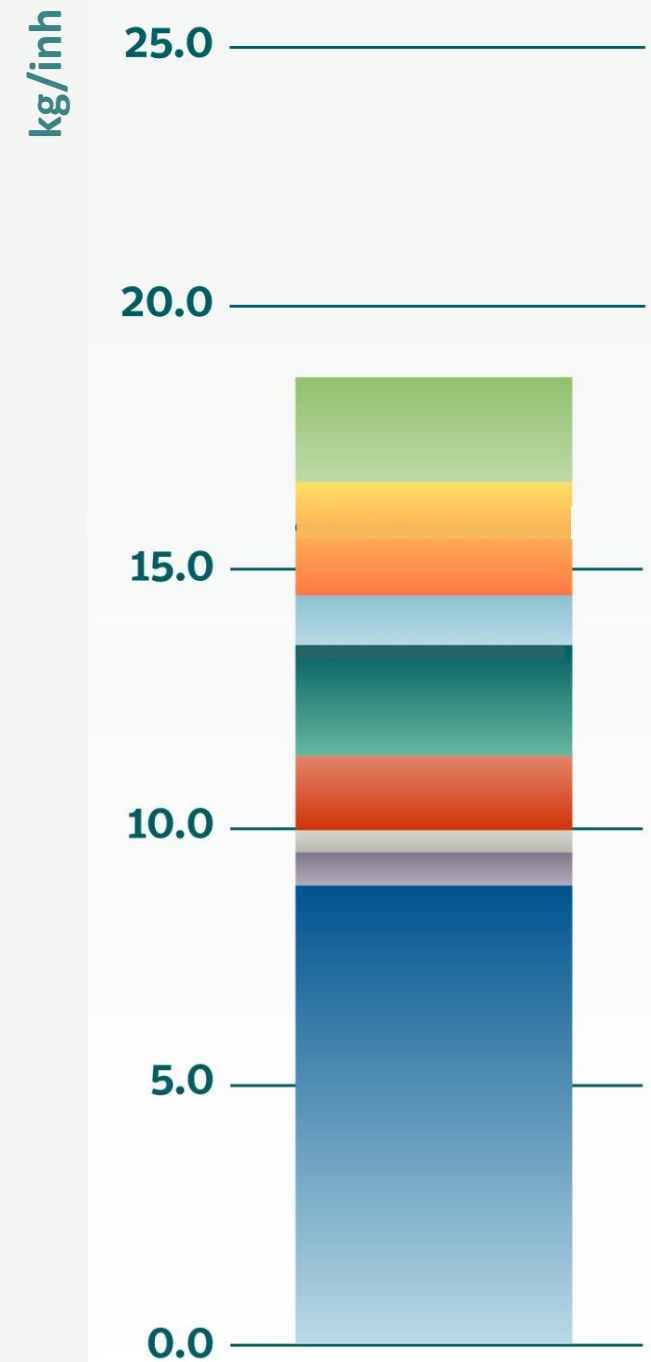
25% is unknown



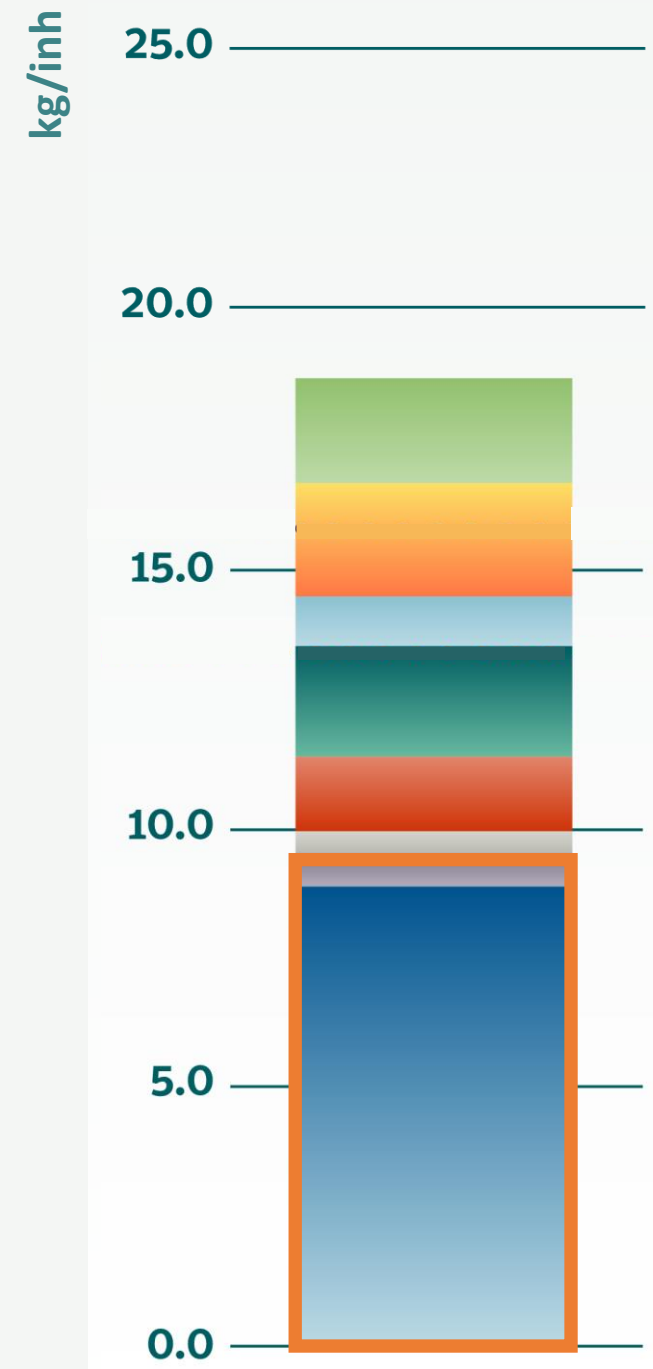
Recap

- Positive effect of 'all actors' approach and mandatory handover
- 55% is reported to be collected
- 20% in other WEEE flows
- 25% unknown

- **Sufficient to meet targets?**

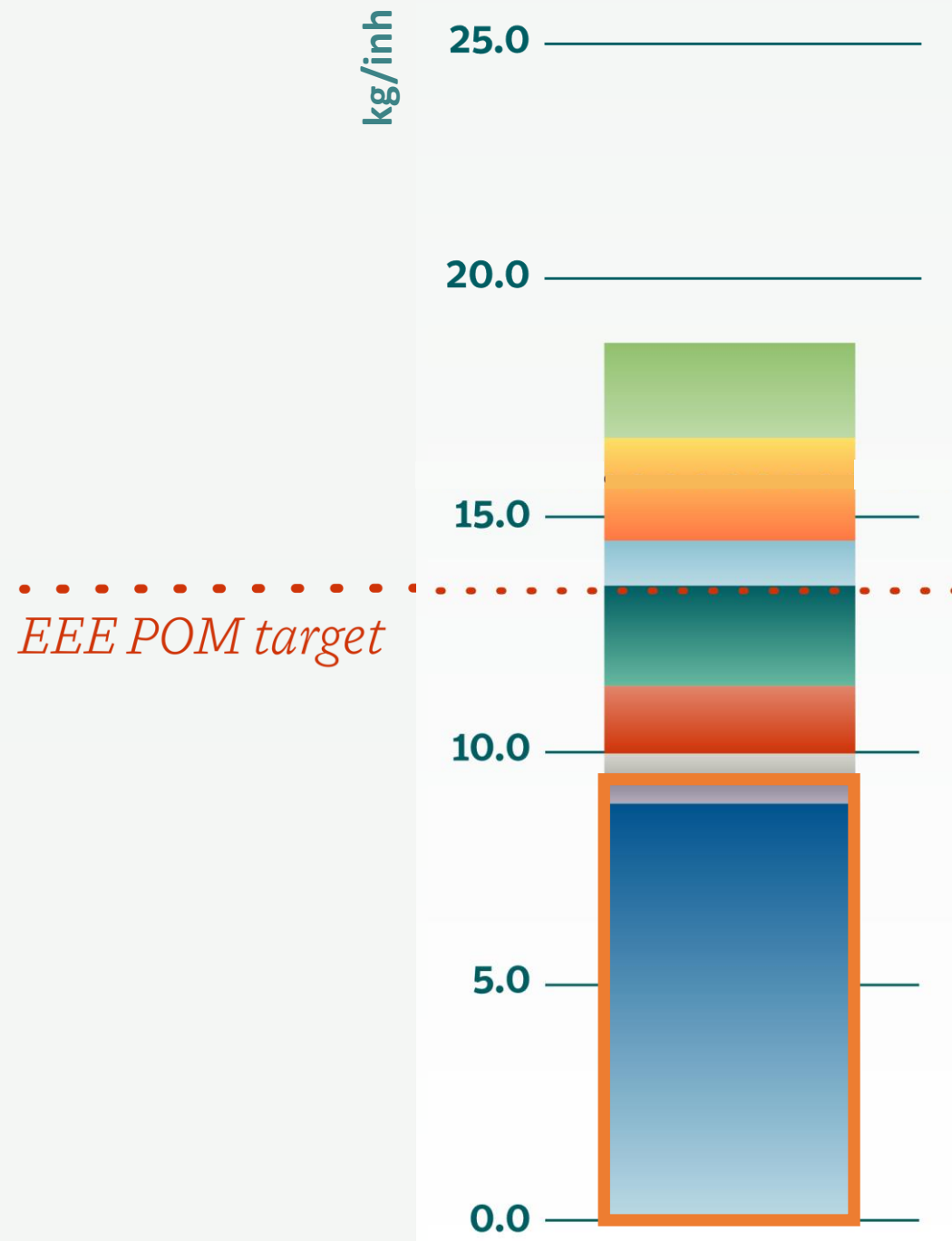


4. Sufficient for targets?

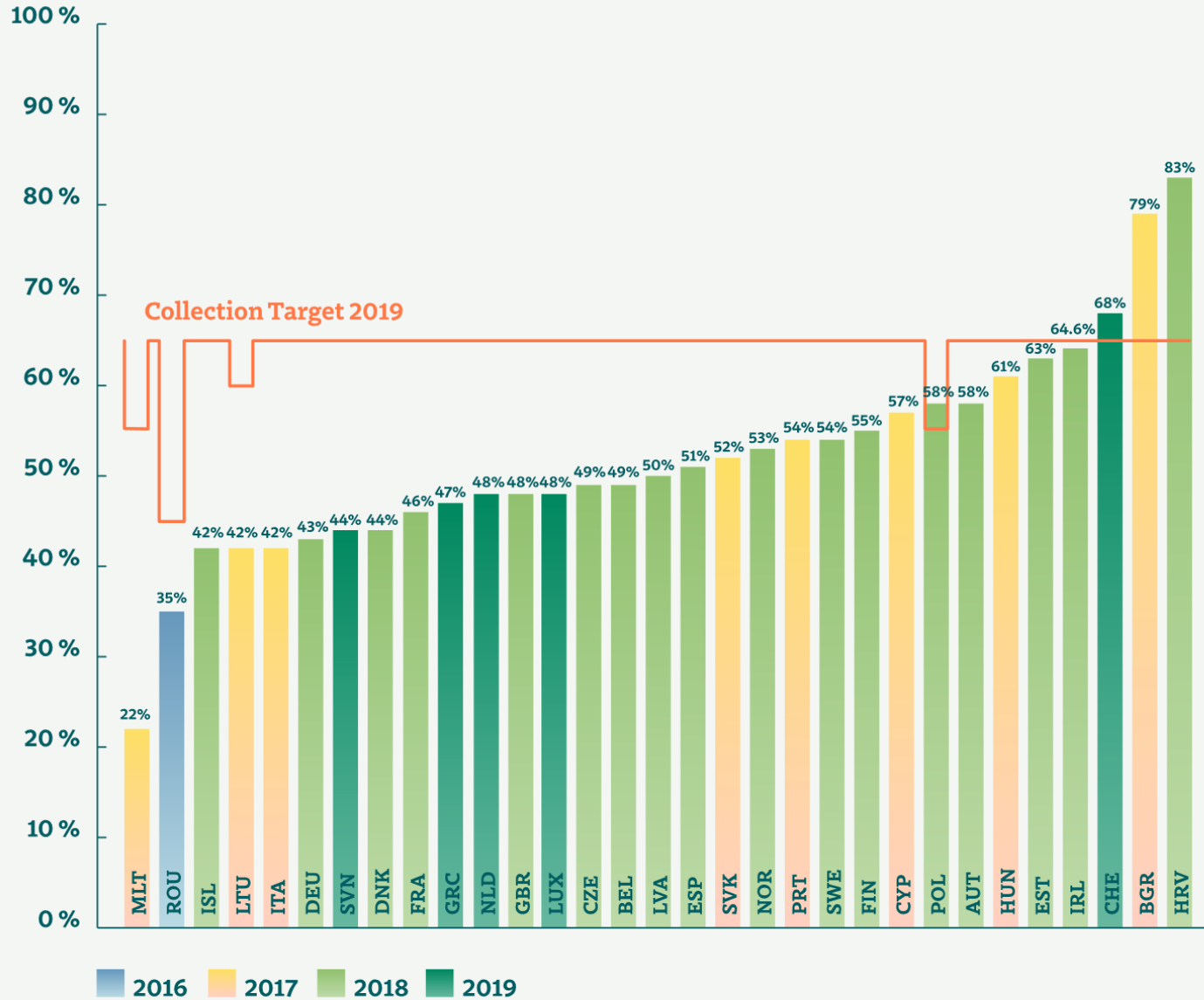


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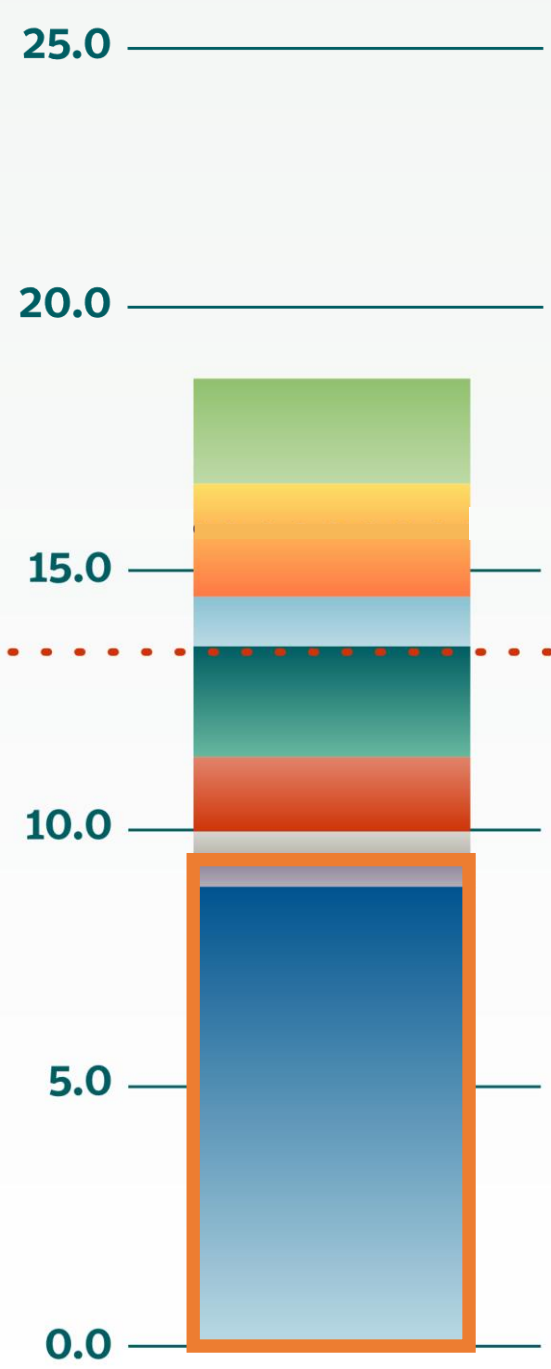
- Max uncertainty WEEE Generated
- Unknown flows
- Illegal Exports
- Metal scrap
- Waste Bin
- Exports for reuse
- Substantiated Estimates
- WEEE Collection



4. Sufficient for targets?

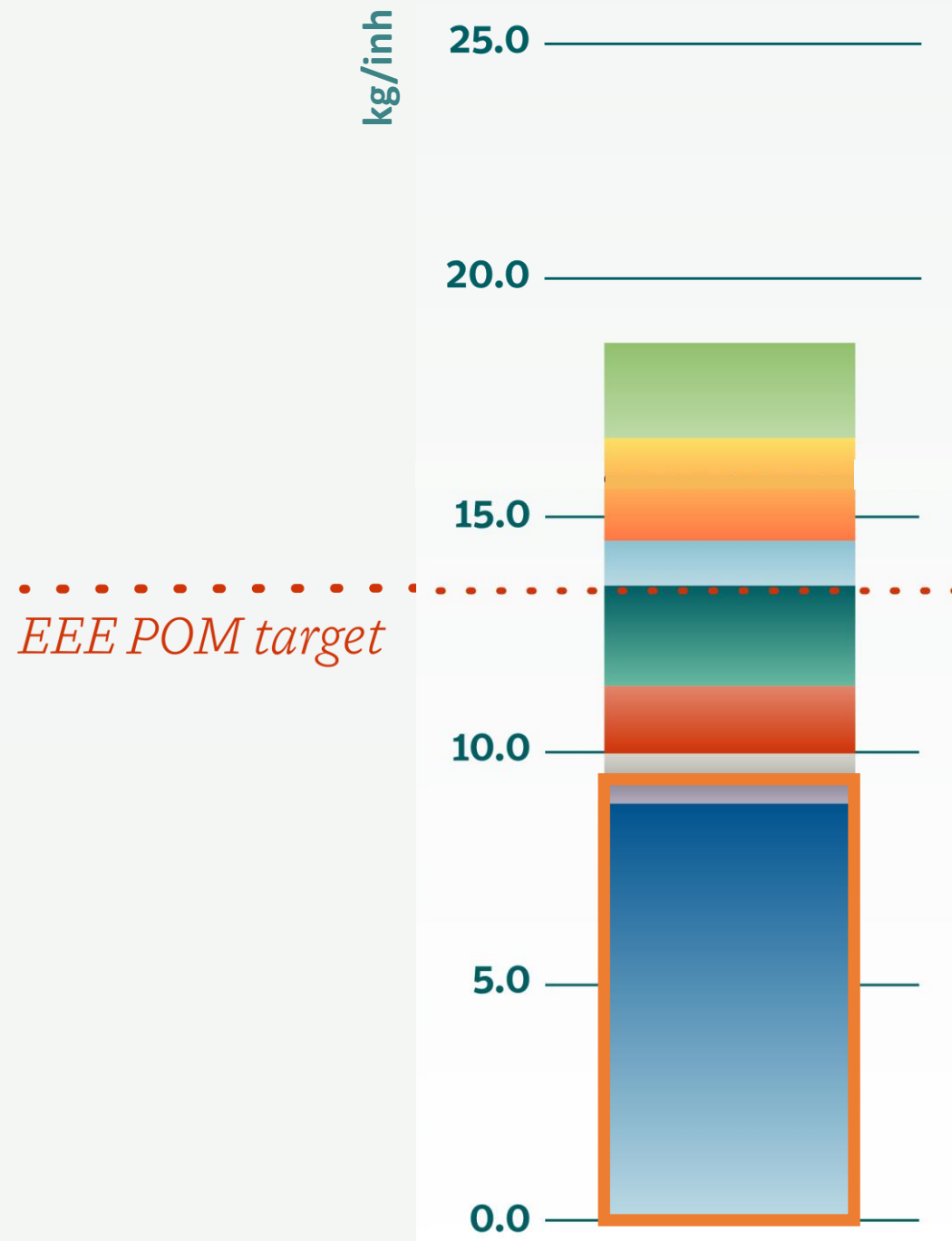


kg/inh



4. Sufficient for targets?

- Max uncertainty WEEE Generated
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- Exports for reuse
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- WEEE Collection

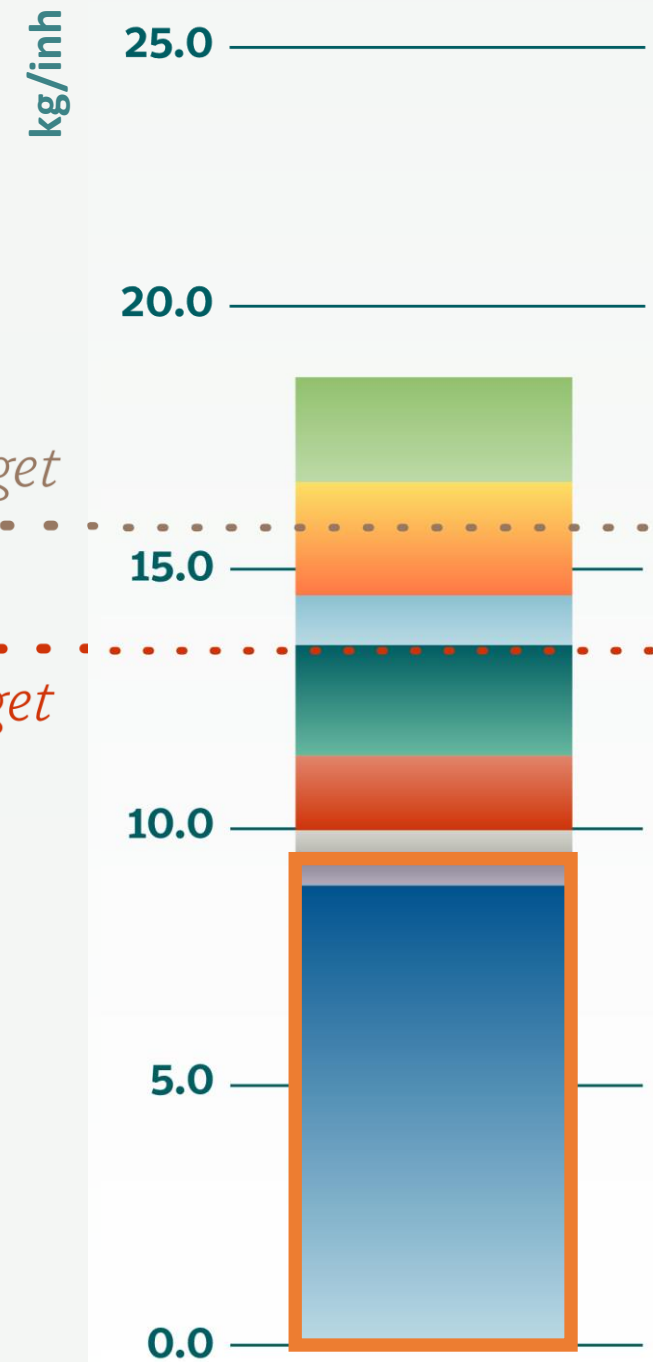


4. Sufficient for targets?

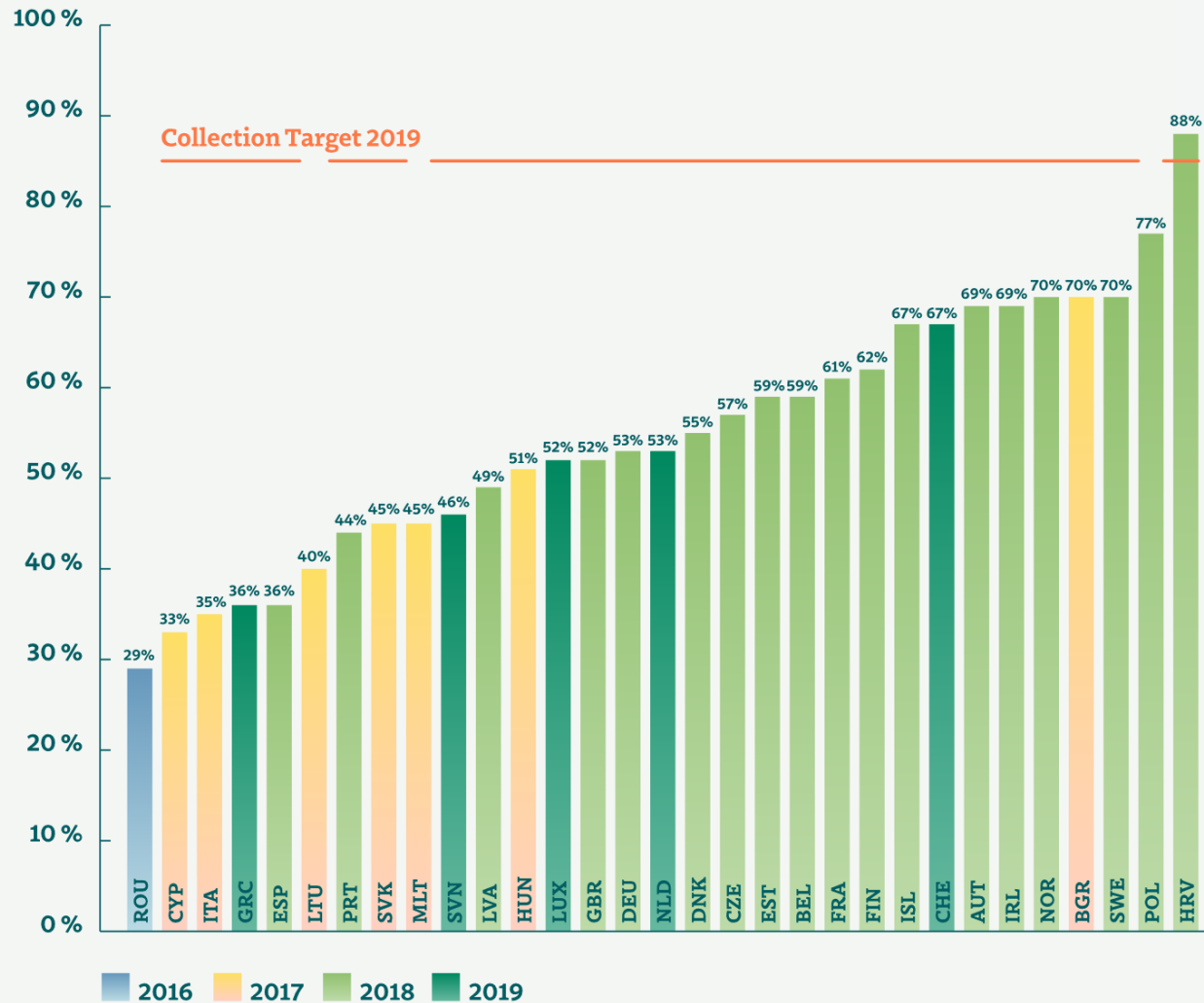
- Max uncertainty WEEE Generated
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- WEEE Collection

*WEEE
Generated target*

EEE POM target



4. Sufficient for targets?



*WEEE
Generated target*

kg/inh

25.0

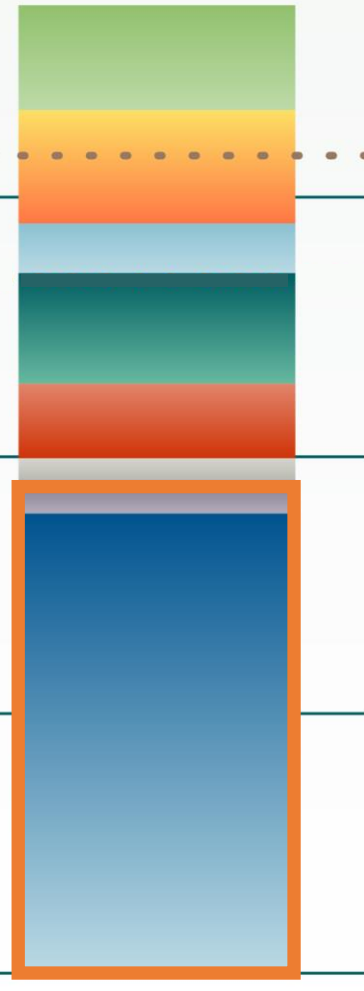
20.0

15.0

10.0

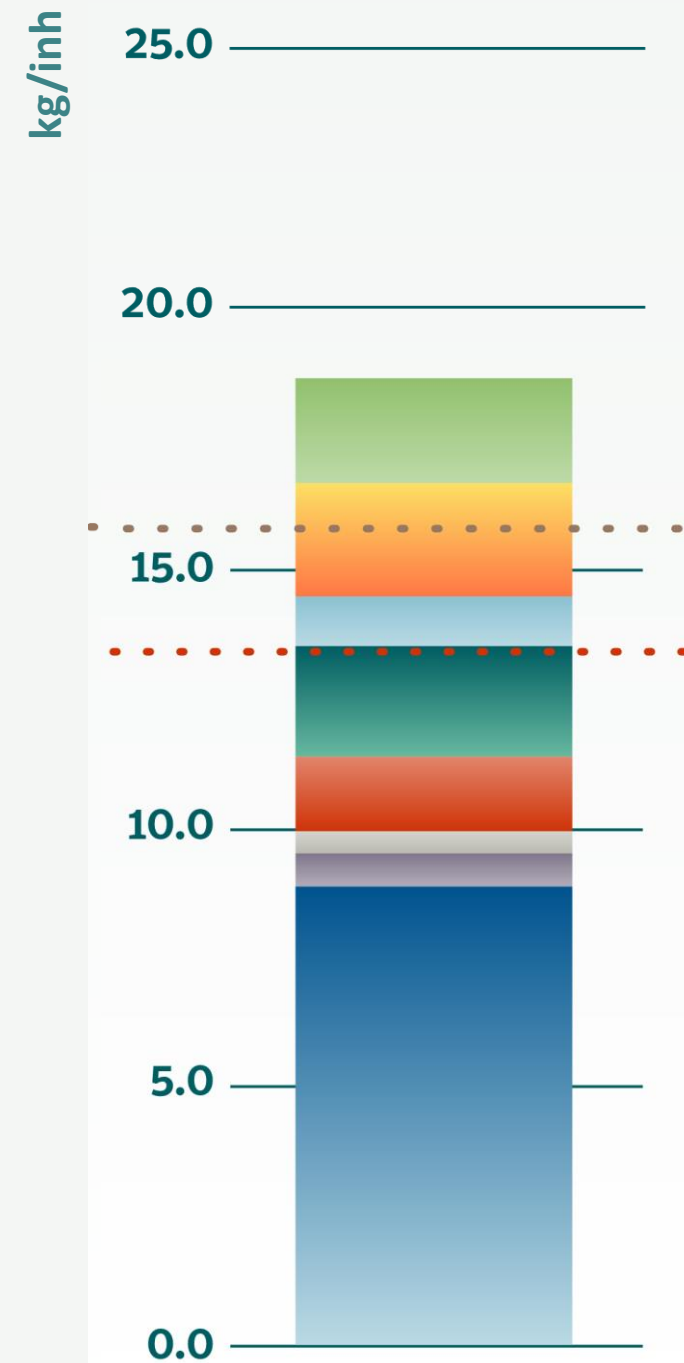
5.0

0.0



Recap

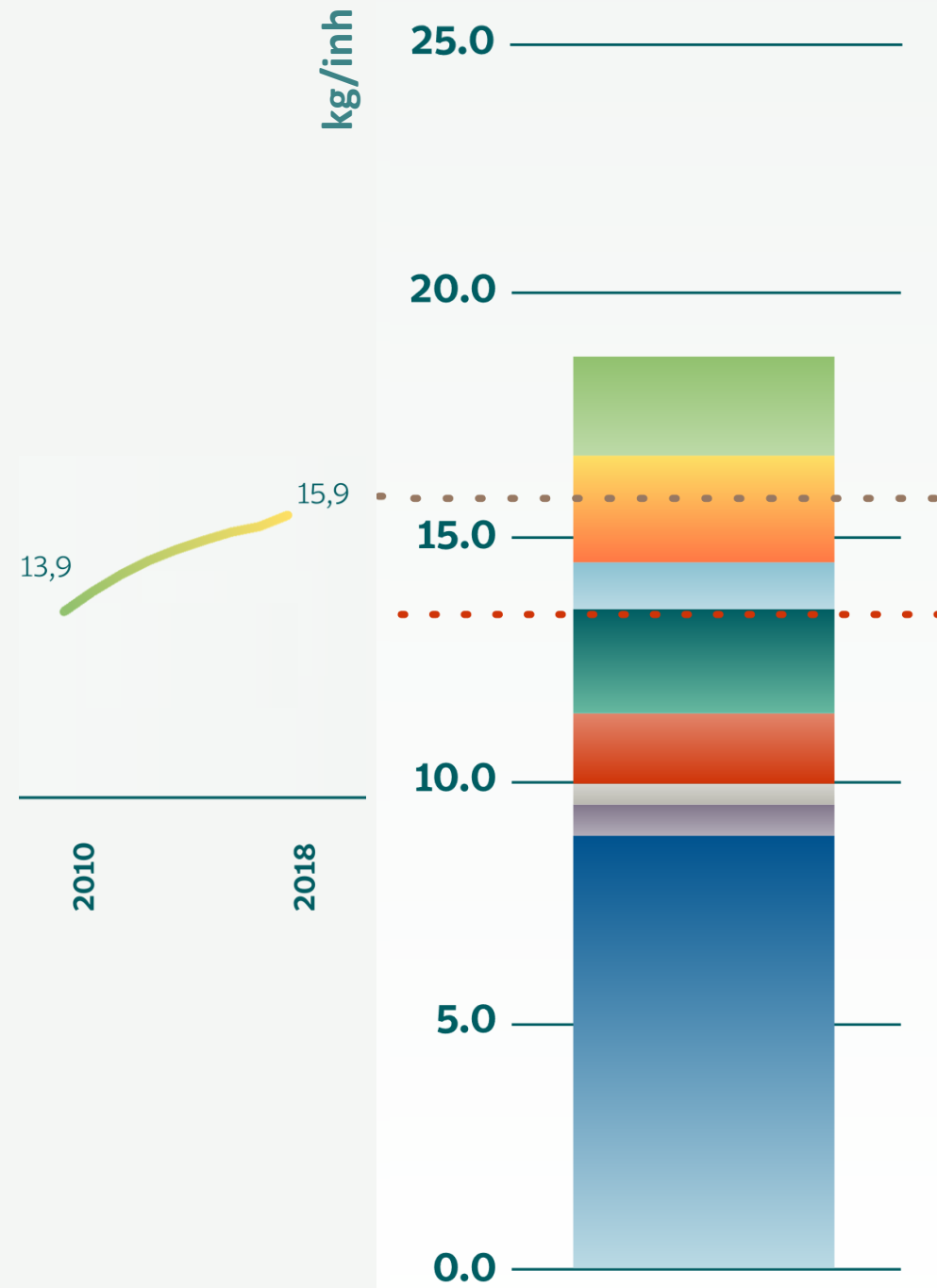
- Positive effect of 'all actors' approach and mandatory handover
- 55% is reported to be collected
- 20% in other WEEE flows
- 25% unknown
- Do not reach collection targets



5. Behavior

Observation

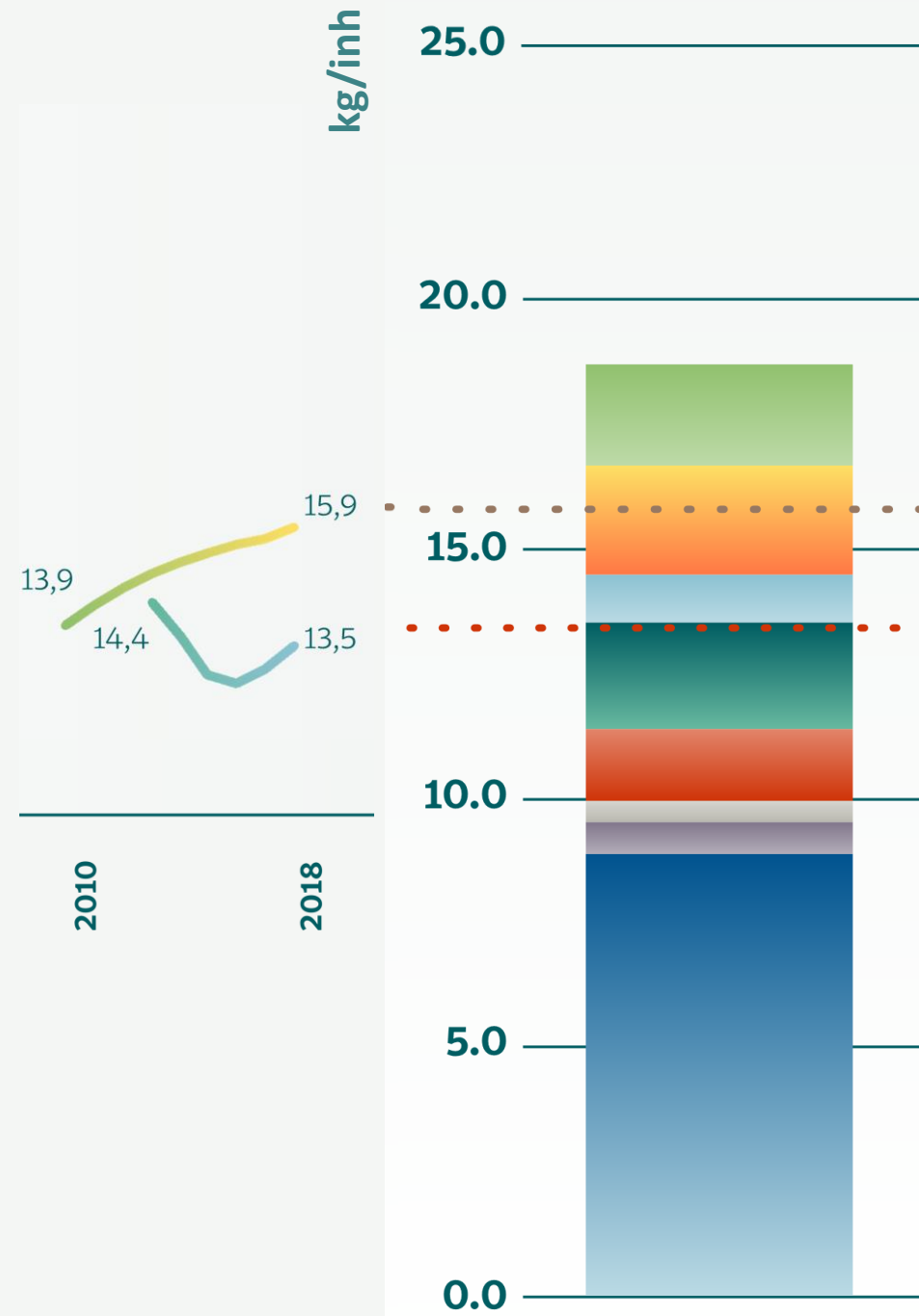
- WEEE Generated target gradually increasing



5. Behavior

Observation

- WEEE Generated target gradually increasing
- EEE POM target is very volatile



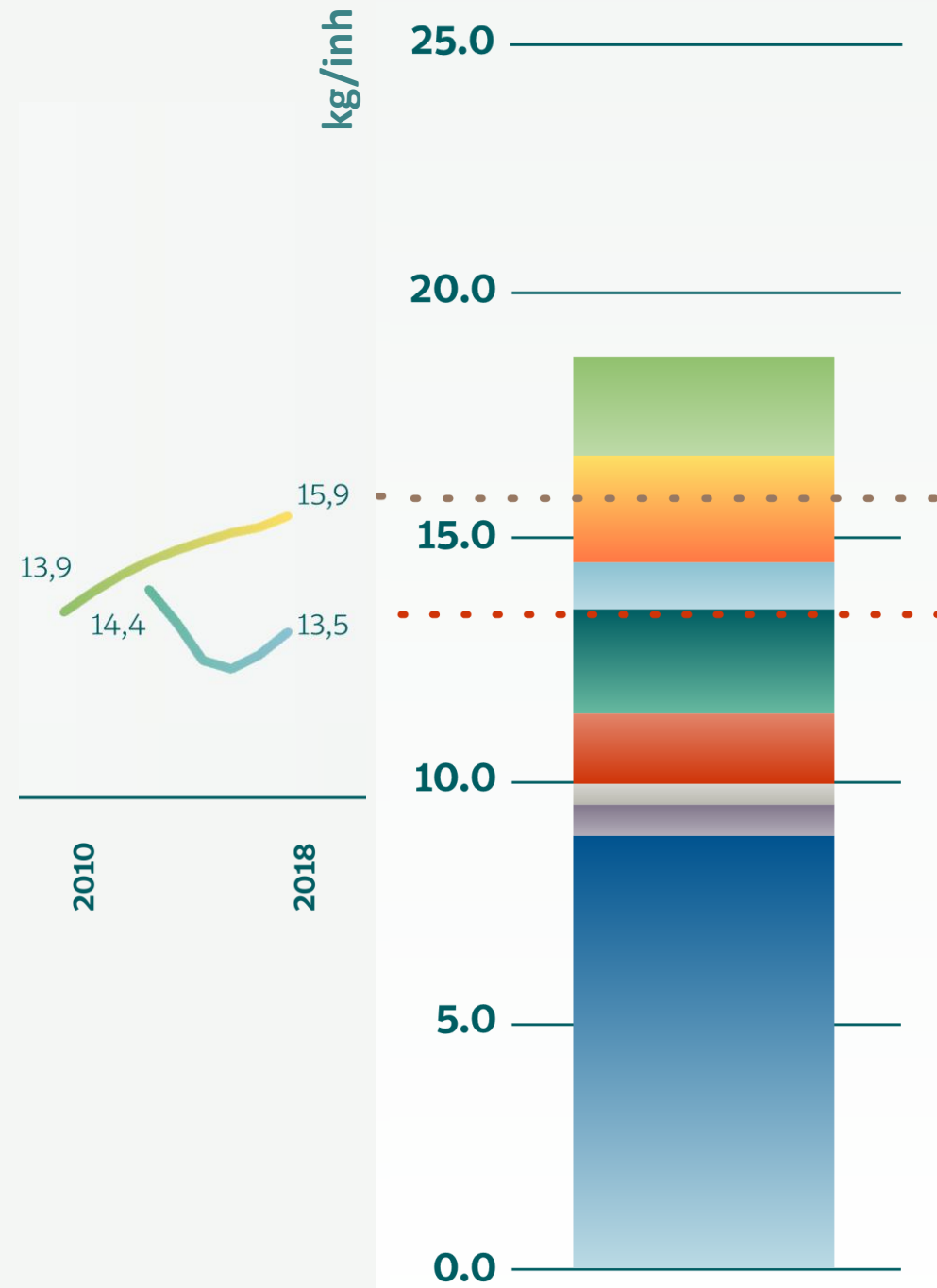
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Drivers

- Fluctuations of EEE POM



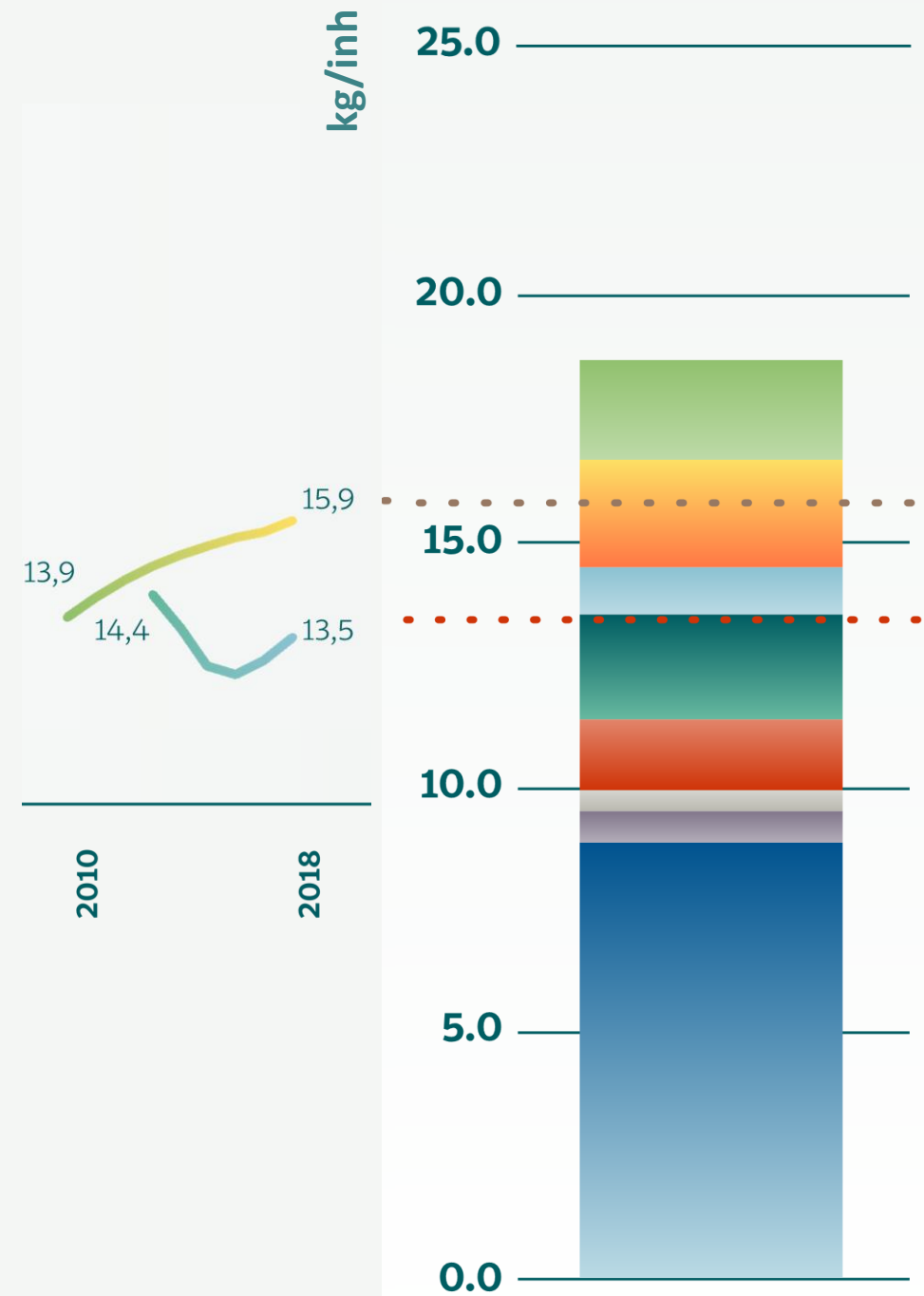
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Drivers

- Fluctuations of EEE POM
 - Photo Voltaic Panels



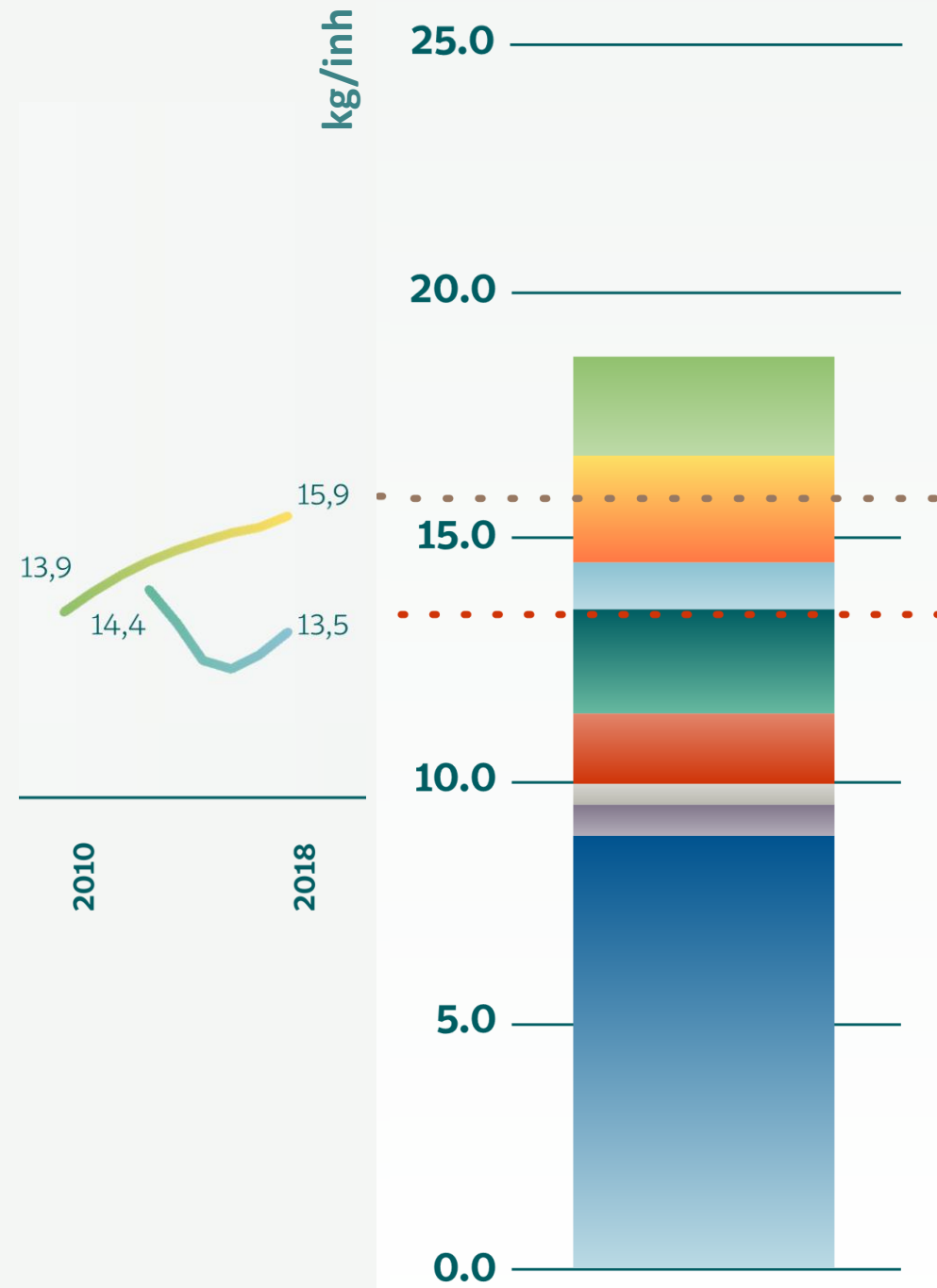
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Drivers

- Fluctuations of EEE POM
 - Photo Voltaic Panels
 - Economic fluctuations



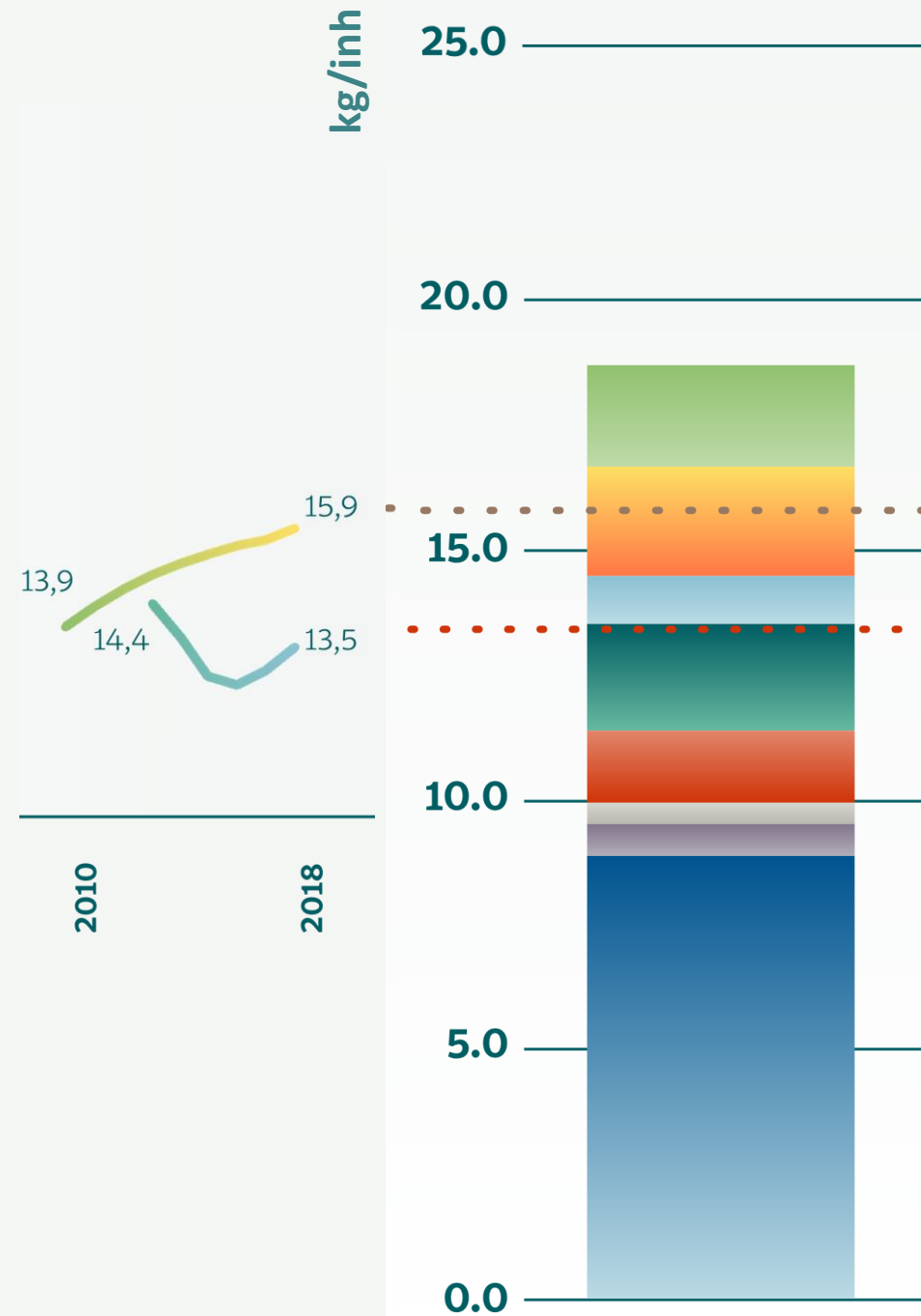
5. Behavior

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- WEEE Generated target gradually increasing
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Drivers

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 - Photo Voltaic Panels
 - Economic fluctuations
 - Increase 1 kg EEE POM → increase 0.5 kg/inh WEEE collection and vice versa



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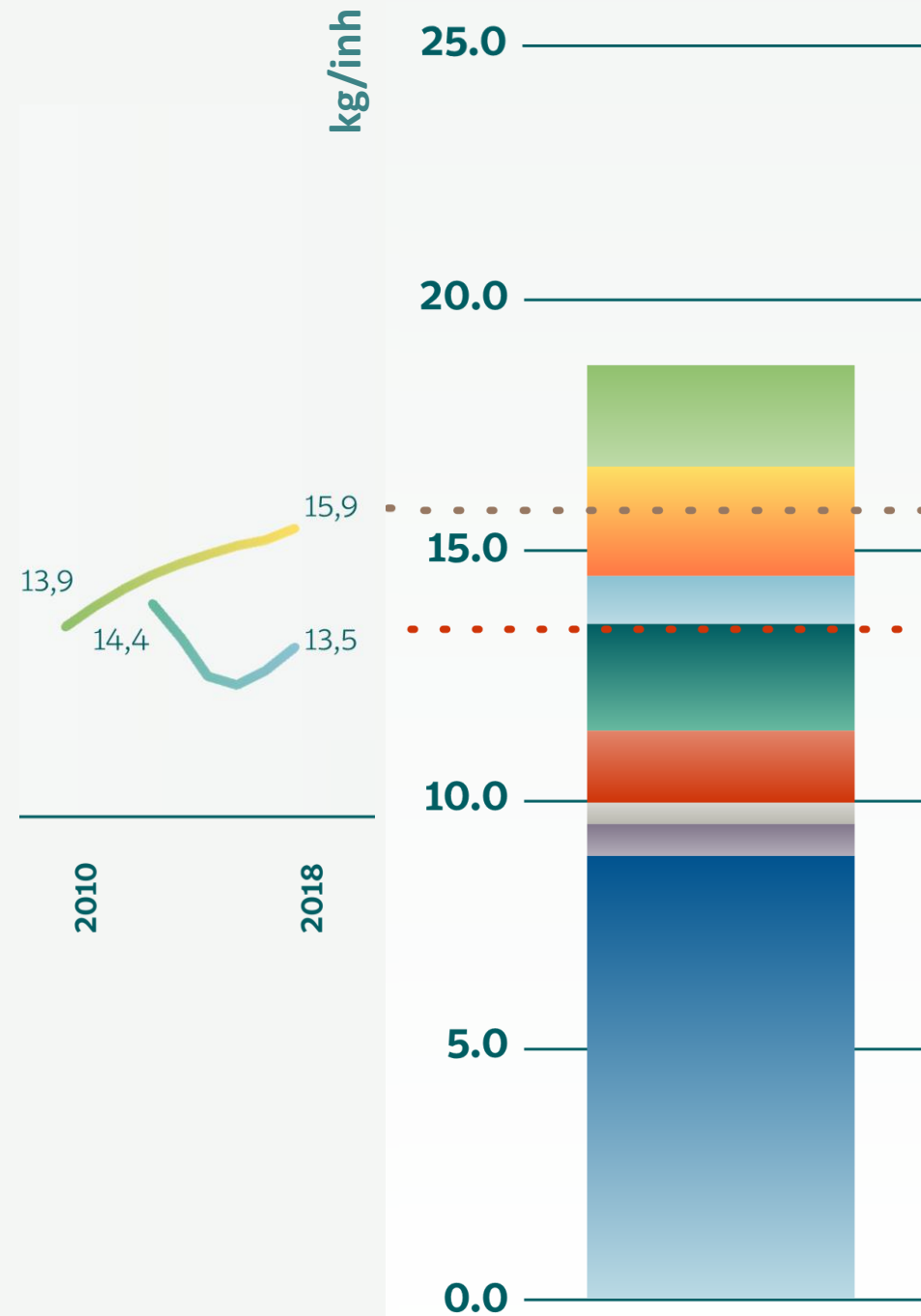
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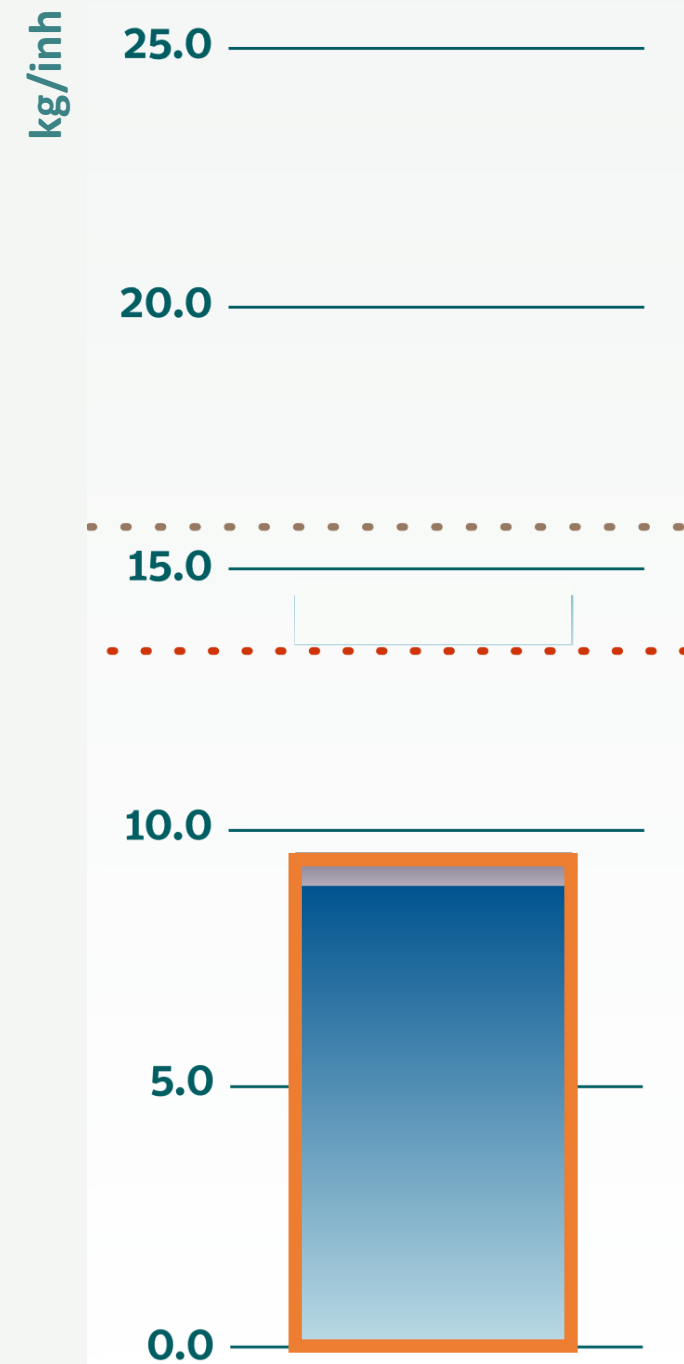
Less impact on collection rates

- Hoarding
 - In- and outflux of hoarded equipment seems to be the same



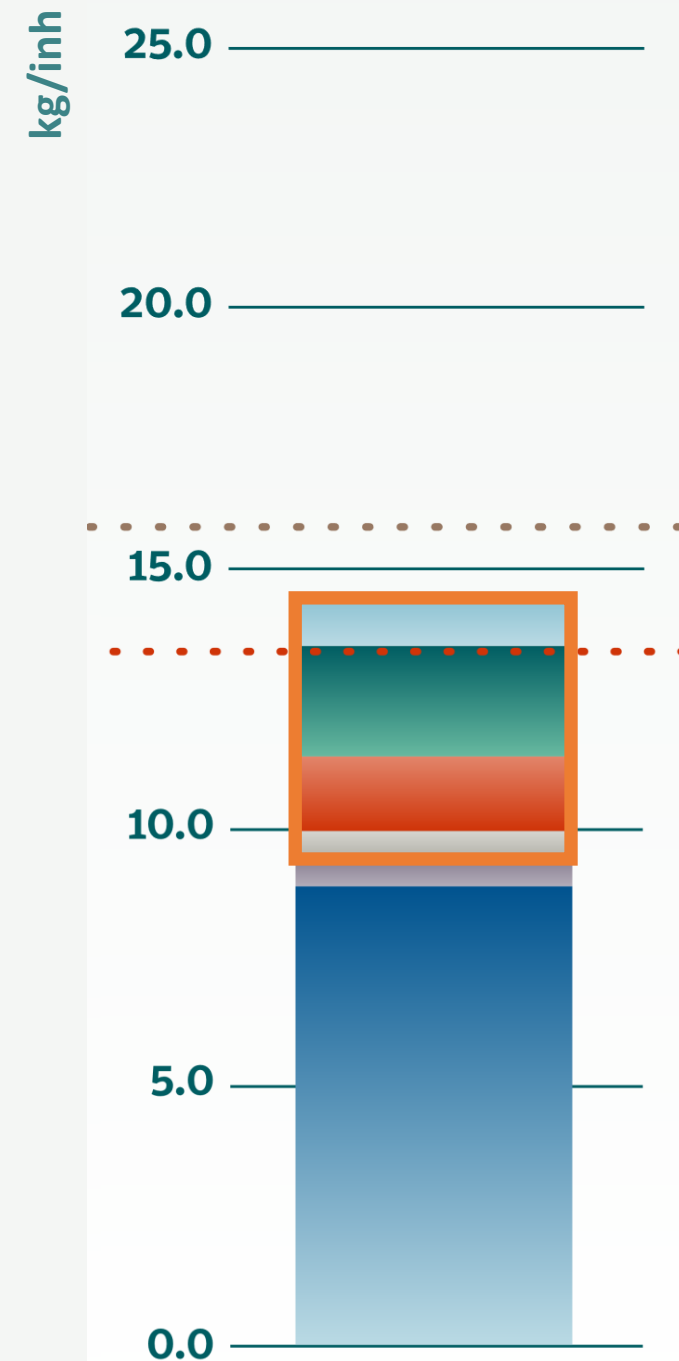
6. Take away messages

- Positive impact of 'all actors' approach and mandatory handover
- **55% of WEEE is reported to be collected**
 - Not sufficient for reaching collection targets



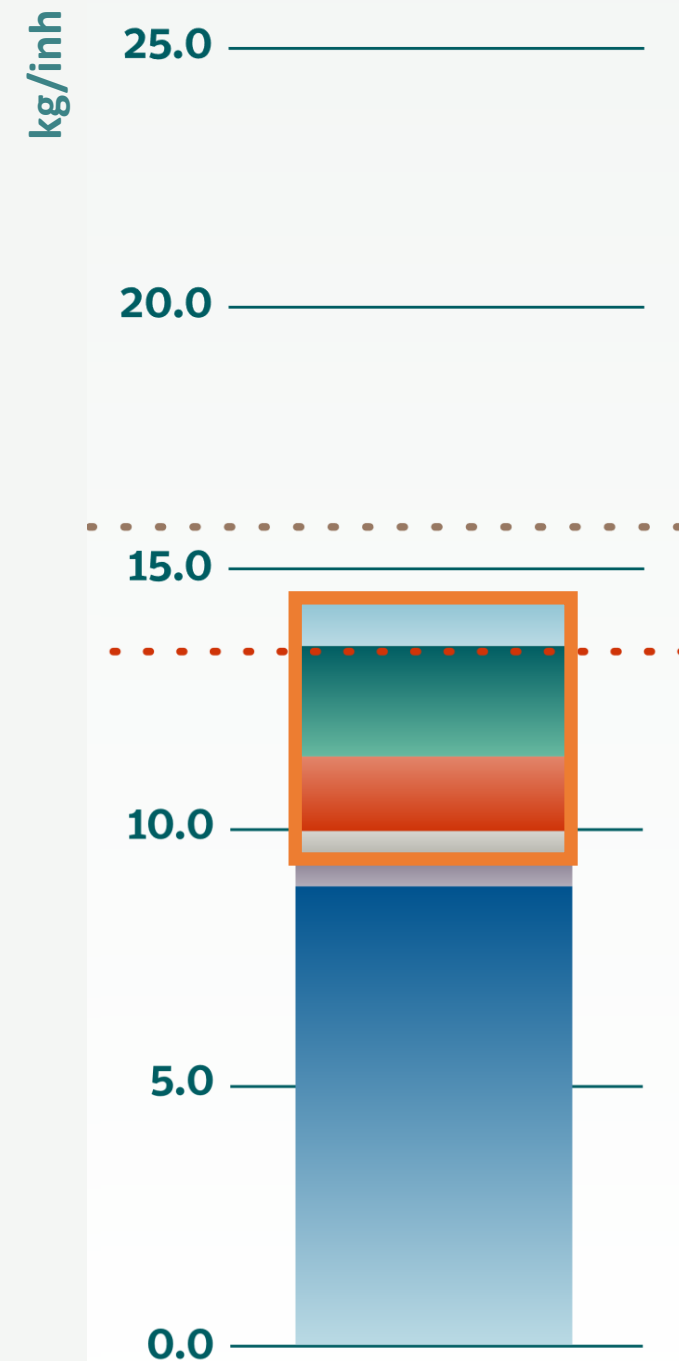
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- Positive impact of 'all actors' approach and mandatory handover
- **55% of WEEE is reported to be collected**
 - Not sufficient for reaching collection targets
- **20% in other flows**
 - Two solutions to reach the EEE POM target



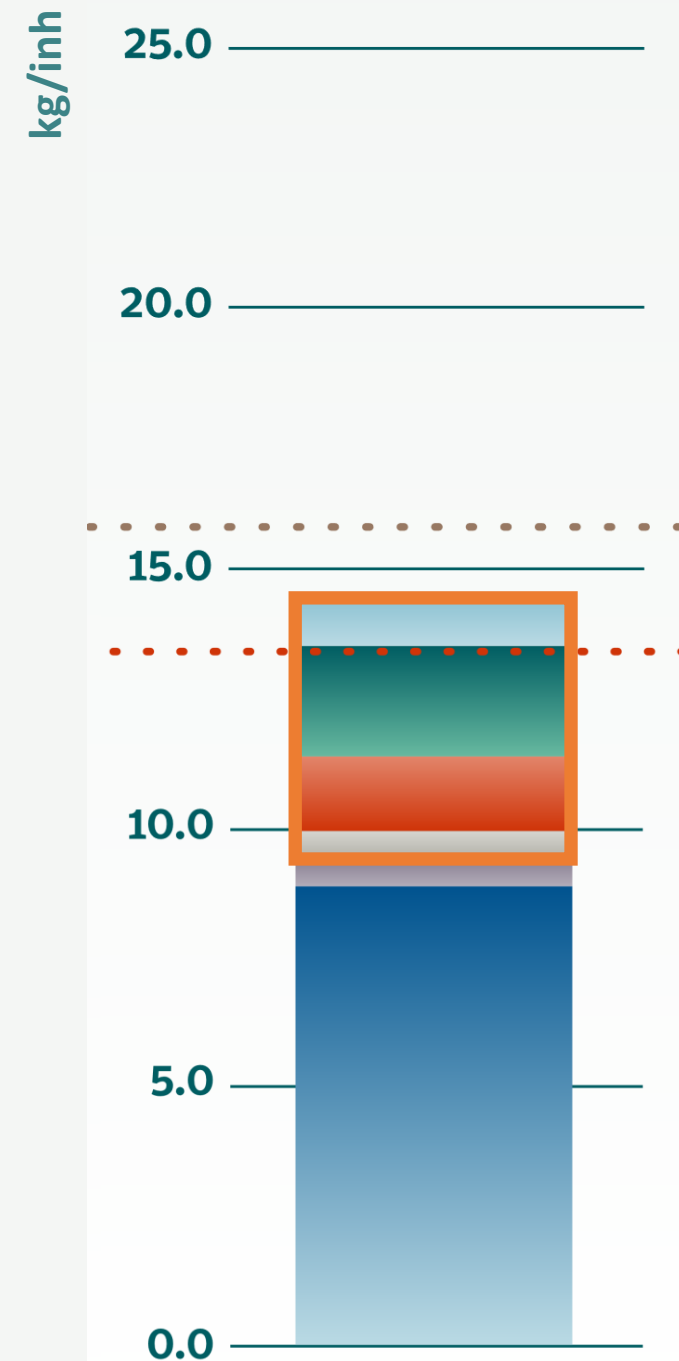
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 - Monitor used-EEE exports - subtract from EEE POM



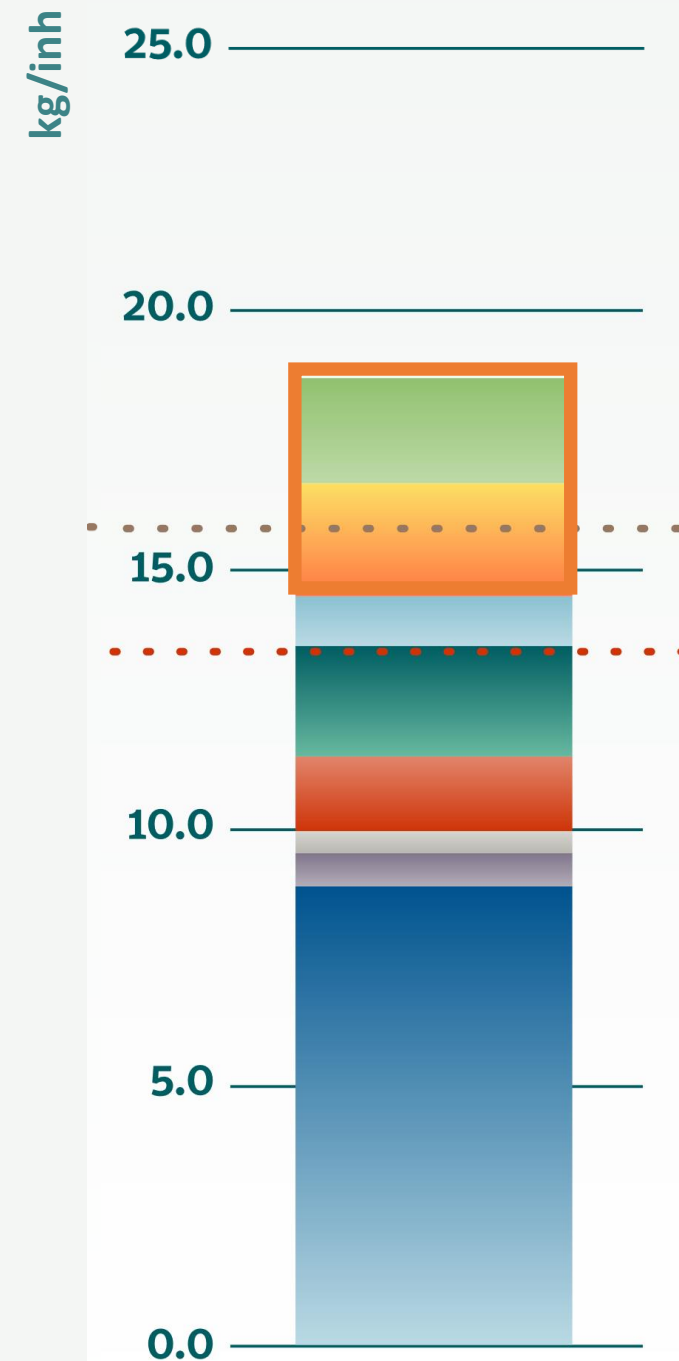
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 - Unwanted flows to be diverted



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- **55% of WEEE is reported to be collected**
 - Not sufficient for reaching collection targets
- **20% in other flows**
 - Two solutions to reach the EEE POM target
 - Monitor used-EEE exports - subtract from EEE POM
 - Unwanted flows to be diverted
- **25% is unknown**
 - Countries have to improve monitoring





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