

The strategies of PFC Emission Reduction in TSIA



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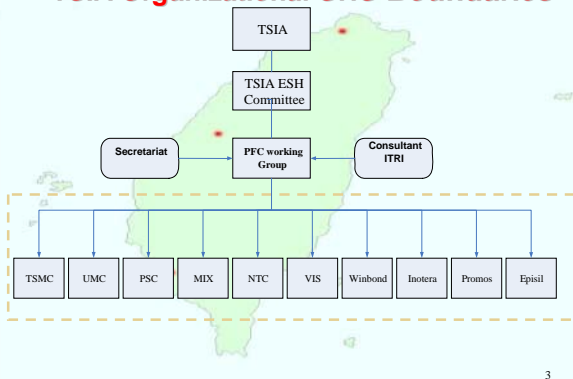
Outline

- TSIA Organization
- PFCs Emission Reduction Technologies
- PFCs Emission in TSIA
- Validation and Verification Plan
- Conclusion

2

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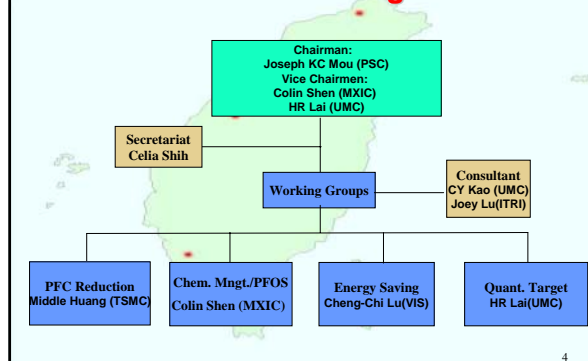
TSIA Organizational GHG Boundaries



3

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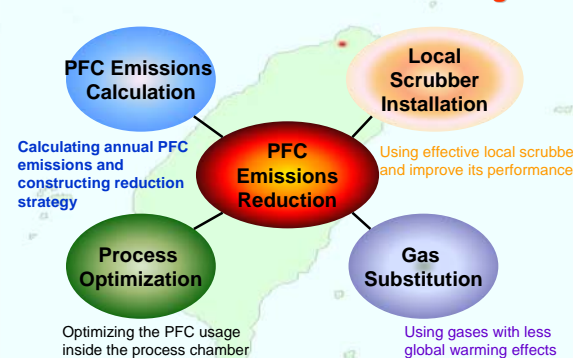
ESH Committee Organization



4

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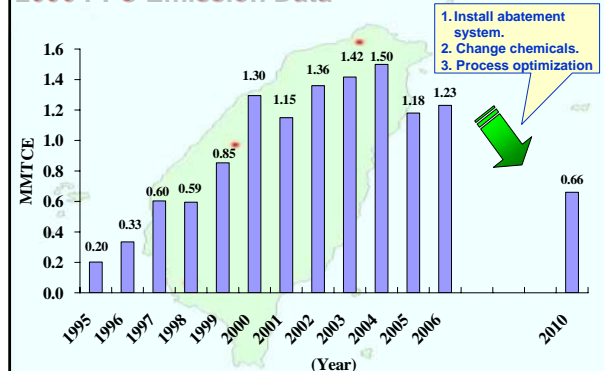
PFCs Emission Reduction Technologies



5

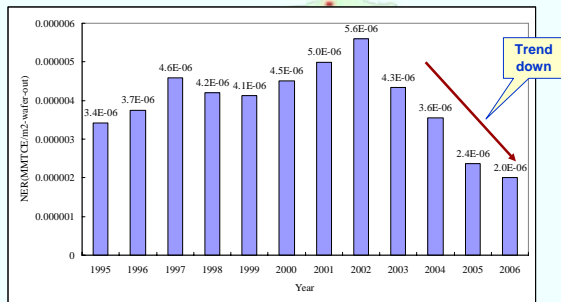
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2006 PFC Emission Data



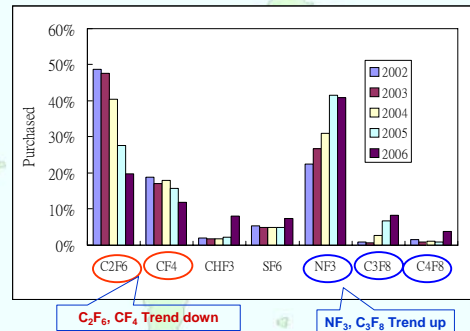
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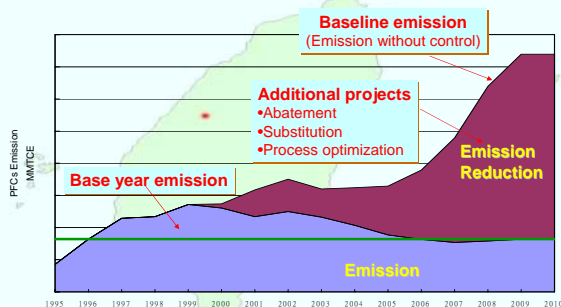
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2006 PFC Emission Data



8

Objectives of GHG Verification



9

GHG Verifications Report

- Follow ISO 14064-1, 2
- Key items
 - Setting boundaries
 - Calculation Formula
 - Monitoring
 - Assessing and reducing uncertainty
 - Managing inventory quality
 - Report format
 - Level of Assurance
- Implementation
 - BSI, ITRI and TSIA Cooperation

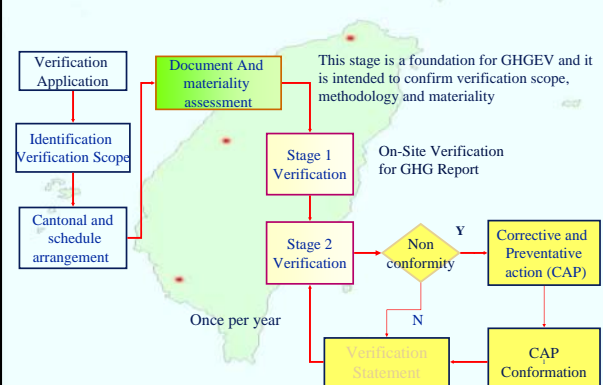
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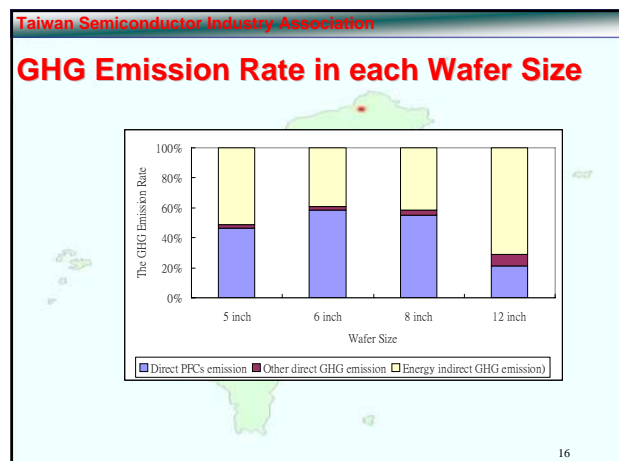
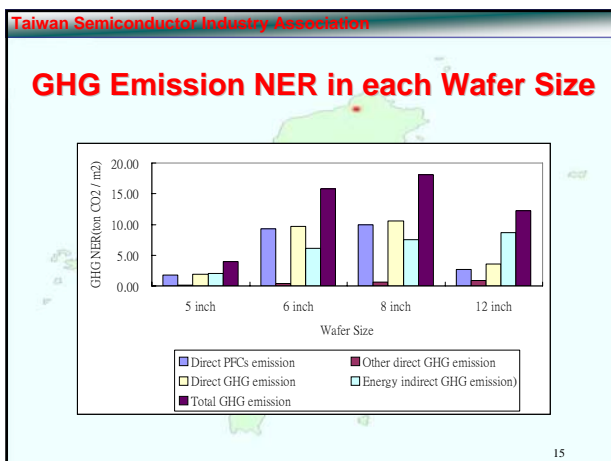
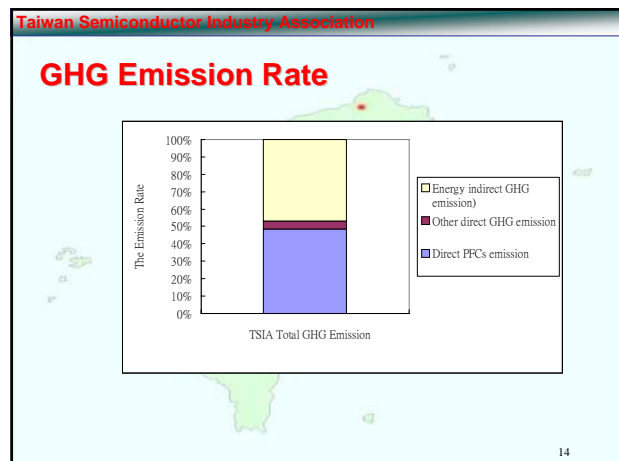
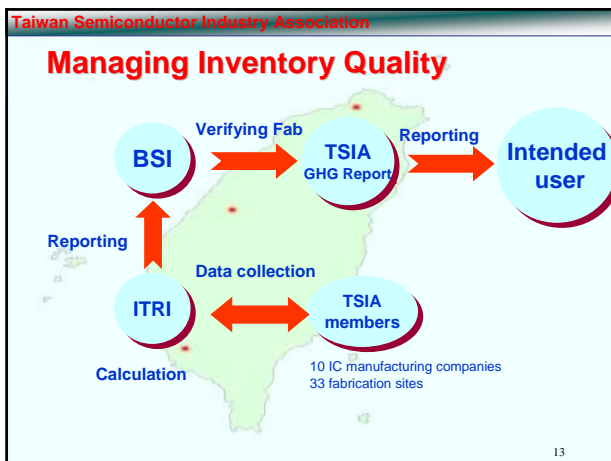
Setting Operational Boundaries

- ISO 14064-1
 - Direct greenhouse gas emission
 - PFCs
 - VOC
 - N₂O
 - Using Fuel
 - Wastewater plant
 - Refrigerant
 - Energy indirect
 - Imported electricity
 - Other indirect

11

ISO 14064 GHG Verification of TSIA





- Taiwan Semiconductor Industry Association
- ### Conclusions
- TSIA already signed a voluntary reduction memorandum with Taiwan EPA to reduce the use and emission for PFCs.
 - Taiwan Semiconductor industry will comply with WSC and Taiwan EPA strategies to reduce PFCs emission.
 - TSIA will continue to develop energy-saving to reduce greenhouse gas emission and achieve sustained development as the goal
 - Getting more the information of GHG emission
 - Verification of the amount of emission reduction & annual emission data from 2000 to 2010
- 17

