

# 國際設備商的法規回顧及內部實驗室工作危害分析 Regulation Review and Job Hazard Assessment of Internal Lab in International Equipment Manufacturer

實習單位：Applied Materials Taiwan

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## Internship Description

- Regulation Review (Singapore) • SEMI Standard Overview
- AMT EHS Website Re-design • Job Hazard Assessment (part)

## Job Hazard Assessment (JHA)

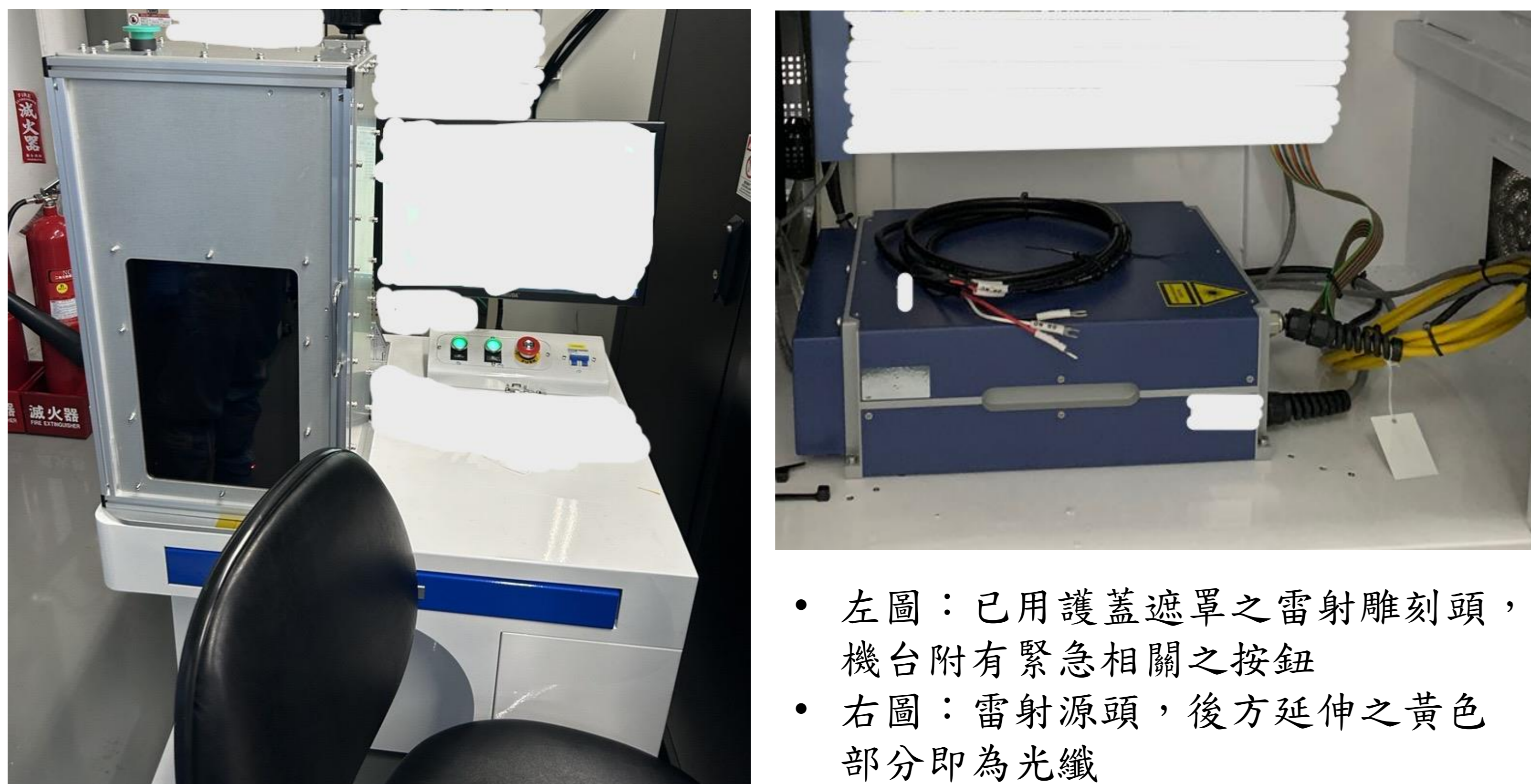
### • Background

Job Hazard Assessment is a way of risk assessment. It is used to identify dangers during works, and take preliminary actions to reduce or avoid the opportunities of injuries or accidents.

### • Step



### • Result – Laser Carving



作業步驟	雕刻作業進行時		
可能危害	雷射光纖外層破損，雷射外漏	護蓋被打開，Class 4雷射外露，高溫可能造成火災	護蓋被打開，現場人員暴露於Class 4雷射之中
工程控制	N/A	1. Interlock 2. EMO	1. Interlock 2. EMO
行政控制	1. 定期檢查	1. 遵守公司內部SOP 2. 雷射人員認證 3. 現場消防設施	1. 遵守公司內部SOP 2. 雷射人員認證
個人防護具	1. 護目鏡 2. 安全鞋 3. 手套	N/A	1. 護目鏡 2. 安全鞋 3. 手套

作業步驟	雕刻作業結束，開門拿出Wafer	保養維修機台
可能危害	電腦軟體當機，持續輸出雷射	人員感電、雷射暴露
工程控制	1. Interlock 2. EMO	1. 接地迴路總電阻小於0.1歐姆 2. Interlock 3. EMO
行政控制	1. 遵守公司內部SOP 2. 雷射認證人員	1. 禁止非機台設備商進行保養
個人防護具	1. 護目鏡 2. 安全鞋 3. 手套	1. 護目鏡 2. 安全鞋 3. 手套

註：以上所有內容之參考來源將會放於後續書面報告中

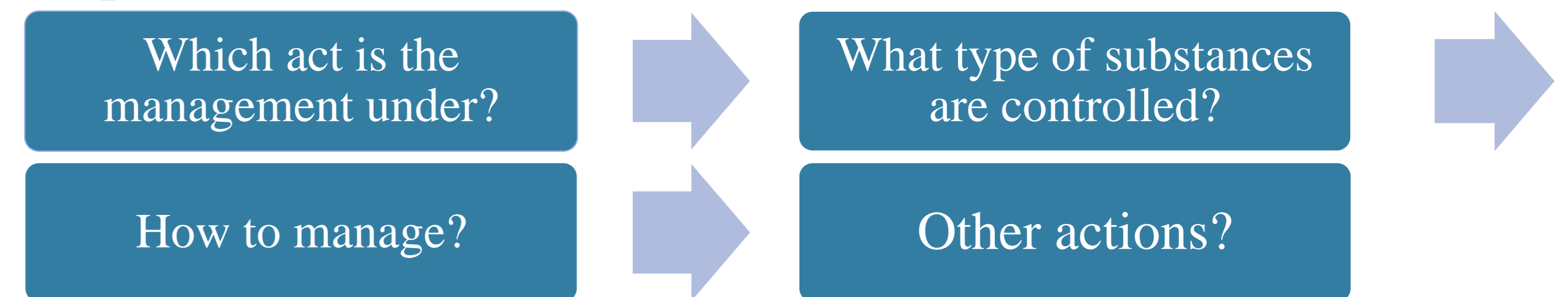
## Regulation Review (Singapore)

### • Background

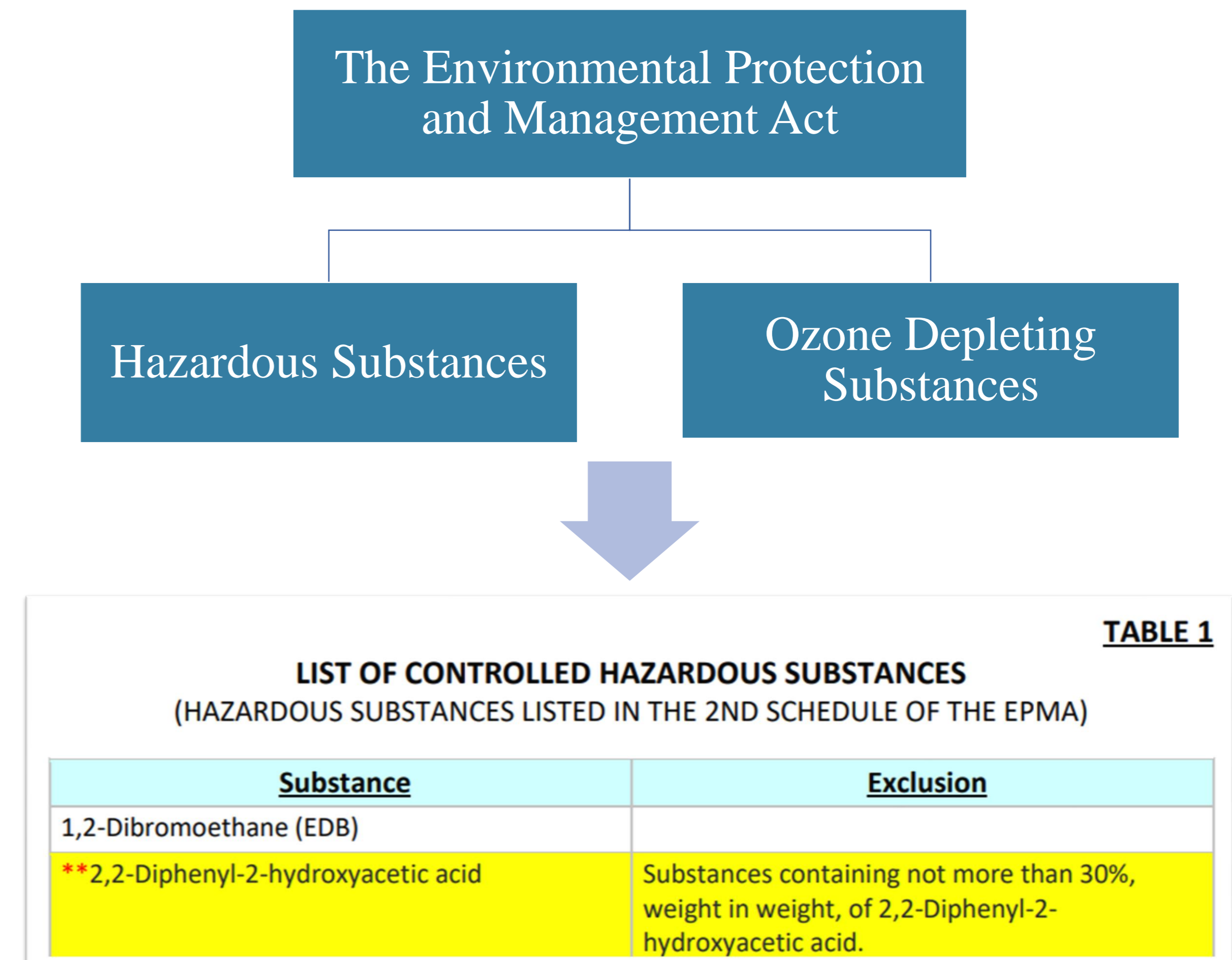
Applied Materials is an international enterprise which has many branch offices around the world. It is inevitable that there is something, like equipment and chemicals, should distribute among all offices.

Moreover, Singapore is the largest semiconductor equipment manufacturing hub in Asia for Applied. It not only has very strict management of related matters, but also is a member of many international conventions or amendment. If Applied want to operate smoothly, reviewing its regulation is necessary.

### • Step

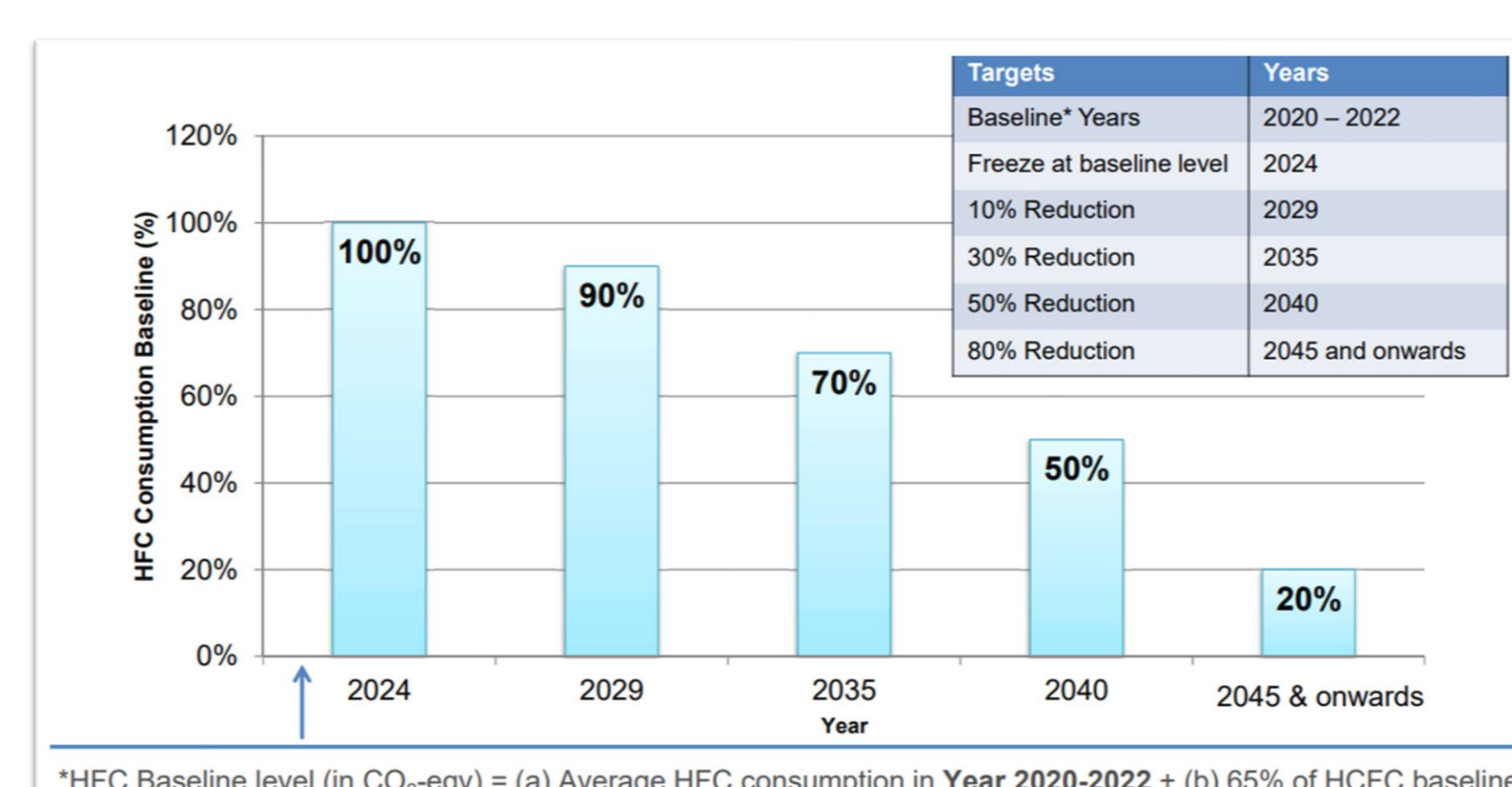
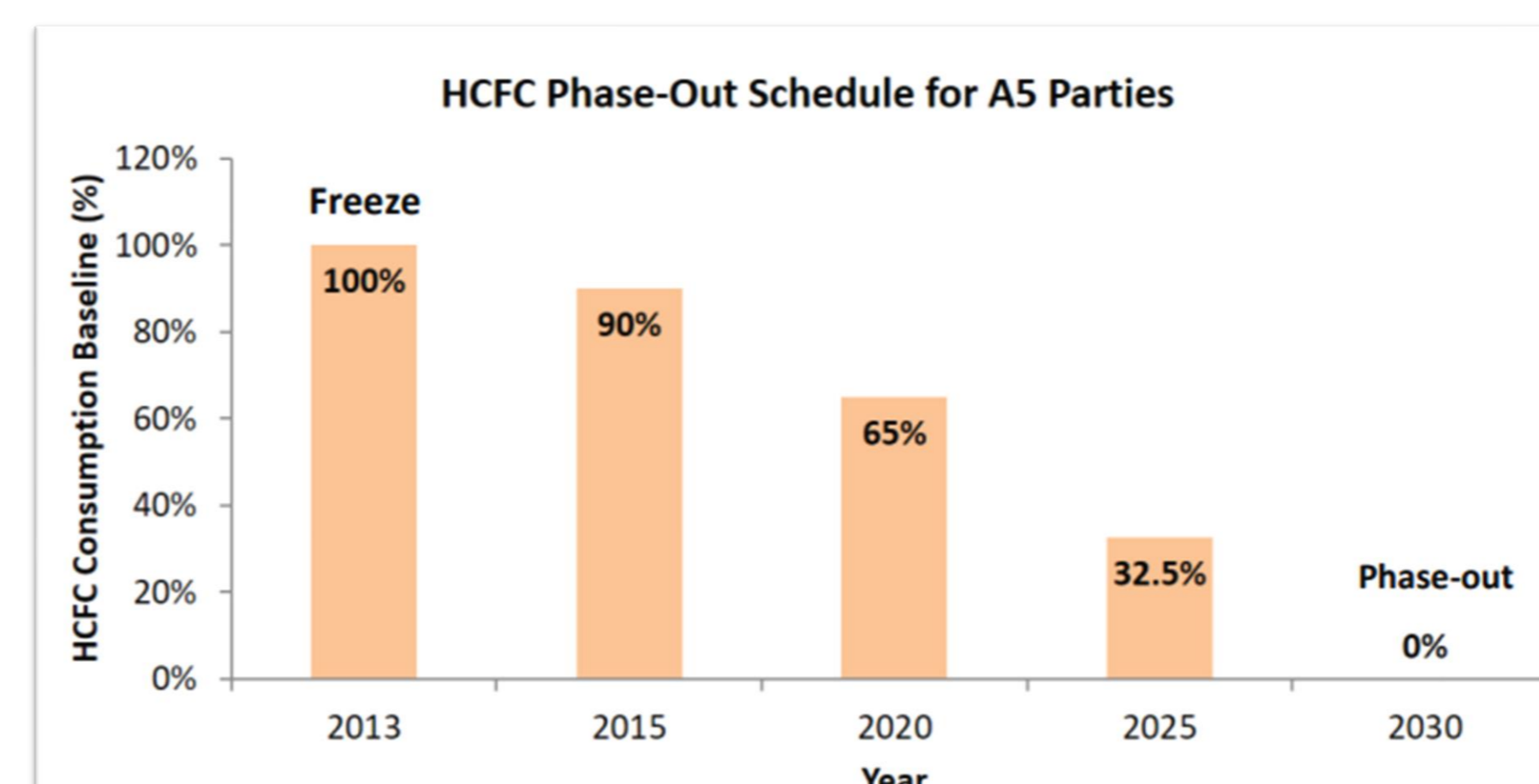


### • Result



▲ The list of ALL controlled substances

- HS Licence
- HS Permit
- Transport Approval
- Import Control
- Technical Requirement
- Transport requirement



◀ Left is the related phase-out schedule of HCFCs and HFCs depending on Montreal Protocol. Singapore might change its action to achieve the continuous goal since it is asked to follow these schedule. After knowing these schedule, Applied can pay attention on the changes and take corresponding actions.