Intel in the Philippines – Adapting to the Environmental Challenges of the Local Setting

> Florence Galindo Intel Philippines

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## **Presentation Agenda**

- Intel Philippines Overview
- Philippines Environmental Regulatory Framework
- Environmental Challenges Facing Industry
- Addressing the Challenges Intel's Experience
- Emerging Trends
- Key Messages





# Intel Philippines Overview

Philippines

China



ew Mexico Texas

30 years of Intel operation in the Philippines (Manila & Cavite)

Malaysia

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India

- >5000 employees in 24x7 operations
- Flash memory devices, microprocessors

First American multinational & semiconductor
Intel company in the Philippines

## Philippines Environmental Regulatory Framework



### **Philippines Environmental Regulatory Framework**

#### Important Regulations That Impact Industry

- Environmental Impact Assessment (PD1586, • DAO 96-37, DAO 2003-30)
  - Environmental Compliance Certificate (ECC) (environmentally critical projects/areas)
  - **Certificate of Non-Coverage (CNC)**
- Toxic Substances and Hazardous & Nuclear Wastes Control Act of 1990 (RA 6969)
  - **Chemicals management Philippines Inventory of Chemicals & Chemical Substances (country register of** chemicals), Control Orders, Permits

 <u>Hazardous waste management</u> – Storage, Transportation, **Treatment, Permits** 



### Philippines Environmental Regulatory Framework

Important Regulations That Impact Industry

- Ecological Solid Waste Management Act of 2000
  - Segregation, recycling & compositing at the municipal level
- Clean Air Act of 1999 (RA 8749)
  - Stationary & mobile sources
  - Ban on incineration
- Clean Water Act of 2004 (RA 9257), Environmental User's Fee
  Intel Reference URL: //denr.gov.ph/



## Environmental Challenges Facing Industry

- Emerging regulations with limited external support infrastructure for enforcement
  - E.g. Inadequate hazardous waste management infrastructure vs. regulatory mandate
    - Limited TSDFs that meet world-class standards
    - Limited availability of technology
    - Waste storage is sometimes the best option until a viable solution becomes available

intel • Awareness/Information dissemination

## Environmental Challenges Facing Industry

- Deficient agency resources vs. needs of the growing industry (internal infrastructure)
  - Manpower resources for timely permit issuance
  - Technical support
  - Continuity of programs vs. changing governance
- Closing the gap between corporate mandate & local conditions

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It is Intel's policy to apply EHS standards consistently wherever a site is located.

## Addressing the Challenges – Intel's Experience

#### Partnerships in industry

- Industry or country affiliation (E.g. Semiconductor and Electronics Industries of the Philippines, Inc. SEIPI, American Chamber of Commerce & Industries, Inc. ACCI, Japan Chamber of Commerce & Industries JCCI)
- Industry-government partnership •
  - Building relations



- Helping shape a supportive regulatory climate for industry
- Leadership in local infrastructure building

#### Intel's EHS Focus:

- Reduce the environmental footprint of our products, processes and operations.
- Be an environmental, health and safety leader in our communities.
  - Set the industry benchmark for world class EHS performance.

## Intel's Experience – Key Concepts in Action

- Local Waste Disposal Breakthroughs
  - Waste as alternative fuel/raw material
    - Partnership between Intel and DENR, DOST & a private cement kiln
    - Institutionalizing an acceptable technology
  - Helping Local TSDFs meet standards
  - Multi-Partite Waste Management Conference
  - Philippines-US Agreement on the Transboundary Movement of Waste
- Regulatory Development
  - Clean Air Act Implementing Rules & Regulations (IRR) developed with more attainable standards
  - Incineration as an acceptable technology for industrial wastes



# **Emerging Trends**

- Self-regulation & simplification
  - Philippine Environmental Partnership Program (PEPP) – greater flexibility
  - New comprehensive Self-Monitoring report vs. individual media reports
  - Environmental User's Fee eliminating preconstruction/operation permits

Continuous & dynamic regulations development

- Waste management guidelines
- Clean Water Act
- Chemical Control Orders
- Industry-government partnerships
  - Innovative waste solutions



## Key Messages

- Challenges facing industry will continue with limited resources from government.
- Industry leadership & partnership building are key to overcoming the challenges of the local conditions.
- Early involvement in emerging regulatory changes will help drive a favorable environment for businesses to operate in.



# Back-Up Materials



# EHS Global Expectation

We have one set of EHS expectations and operating principles for all of our operations, no matter where they are located. We expect the same level of EHS performance from an operation in China as we would from a similar operation in the United States.

Second, when we build a factory in a new market, our EHS requirements are typically more stringent than the local practices. We have anecdotal evidence that our expectations and requirements help raise the expectations for the whole industry. We saw this happen in Ireland a decade ago, and we are seeing it again in China and India today

> Craig Barrett, CEO EHS Report, May 2004 http://www.intel.com/intel/other/ehs/



### **2003 Environmental Performance**

- Recycled 56% of chemical waste worldwide
- Recycled 67% of solid waste worldwide
- Global VOC emissions reduced for the 7th year
- Savings of over 3.3 billion gallons of water since '98
- New lead-free product technologies available
- Registered all worldwide manufacturing facilities to ISO14001
- Purchasing 30% recycled content paper in US
- Two consecutive years of teaching industry engineers "how to design green products"
- Over 50 national & international awards received since 1998

Intel is ISO14001-certified.

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  - <u>http://www.intel.com/community/</u>

