Environmental Trend, Measures and Regulations

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For a world where human live in harmony with mother Earth
Environmental Trend
Economic development and environmental protection

- Hard to balance.
Sept 1962

Silent Spring

Rachel Carson

The author of THE SEA AROUND US and THE EDGE OF THE SEA. Questions our attempt to control the natural world about us.
Environmental pollution

- Water
- Soil
- Air
Plastic garbage

- 1950 to date, the world produces > 9 billion tons of plastic. Most of it are still around.

- Forecast: By 2050, creates 13 billion tons of plastic (outweight the fishes in all oceans).

Science Alert
Oceans are calling for help: ~ 5.250 plastic pieces = 268.940 ton = contain in 537 boeing airplanes = floating in all oceans. (Livescience)
Vietnam= top 5 countries discharging plastic garbage to ocean= 1,8 million tons/year
Fish, Bird and other species (including human beings) are poisoned with micro plastic. 
Cancer, reduce reproductivities
• HCMC created 7,000 tons of domestic waste
• And 1,500 - 2,000 tons of industrial waste (350 – 400 tons of hazardous wast)
• 86% are transported to the City Dumpsite (Đa Phước Waste treatment plant). 14% recycle (paper, plastic, iron, glass).
• (Recycle rate in US is: 34,3%, Singapore: 60%).
• Garbage dump site ➔ air, water and soil and impact to community health.
• Dumpsites creates CO2, CH4, climate change gases.
Water pollution: industry waste water, domestic waste water are not properly treated
**Waste water in HCMC**

- **171,000 m³/ngày**
  - Not treated: 9.8%

- **195,000 m³/ngày**
  - Treated from discharge sources: 11.2%

- **1,384,000 m³/ngày**
  - Collected and treated in waste water treatment plant: 79%
Vietnam: 9.000 people die for water and poor hygien condition. > 100.000 people got cancer for using polluted water.

Water pollution ➔ huge lost for industries, agriculture and husbandary & aquaculture (MoH and MARD)
Air pollution

- 1952 in England: Mysterious fog killed 12,000 people and many animals, hospital: 150,000 people.

- Mysterious unveiled only in Nov 2016: NO₂ turned SO₂ into sulfuric acid (H₂S) and killed. (SO₂ discharged from charcoal burning and in thermoelectricity and other sources

http://uk.businessinsider.com
Fresh air bottles in China

One fresh air bottle contains ~ 7,7l of fresh air harvested from Rocky Mountain, Banff National Park, Canada costs 15 USD, (equal to 50 water bottles in China). Sold by Vitality Air.
App. Monitor air quality in Hanoi and HCMC.
Deforestation and biodiversity degradation
Illegally trade and exploitation of endangered wildlife.
Earth is experiencing the 6th mass extinction
Climate change
Climate change consequences

- Increase the Earth temperature, melting ices ➔ Sea level raise ➔ Land losing and salivation.
Vietnam=top 7 countries most seriously effected by climate change. Lost ~40% of Mekong Delta by 2100.
Extreme weather: Flood, tornado, drought...
Reduce crop productivity
Disease: anthrax, Zika fever and zombie diseases (smallpox and others), cholera...
Environmental Regulations
International regulations

- International environmental law
Vietnam regulations

- Law on Environmental Protection of Vietnam issued on 23/06/2014. Effective from 01/01/2015.
- Decree No. 19/2015 / ND-CP dated 14/02/2015, effective 1 April 2015, guiding the implementation of a number of articles of the Law on Environmental Protection
- Provincial decisions on environmental protection in textile industry
Decree No. 38/2015 / ND-CP, dated April 24, 2015, effective on June 15, 2015: Waste and scrap management.


Decision No. 16/2015 / QD-TTg, dated 22/05/2015, effective as of 15/07/2015: Regulations on recovery and disposal of scrap products.

TCVN 6705: 2009: General solid waste - Classification.


- Circular No. 27/2014 / TT-BTNMT, dated 30/05/2014, effective on July 15, 2014: Regulation on underground water exploitation registration, form of dossier for grant, extension, adjustment and re-grant Water resources permit (related to waste water discharge regulations).

- Decree No. 38/2015 / ND-CP, dated 24/04/2015, effective 15th June 2015: waste and waste management.
Decree No. 154/2016 / ND-CP, dated 16/11/2016, effective 01/01/2017: Environmental protection fee for wastewater.

Circular No. 31/2016 / TT-BTNMT, dated 14/10/2016, effective 01/12/2016: On environmental protection of industrial clusters, business and service centers, craft villages and production and business establishments. Business services.

Circular No. 27/2014 / TT-BTNMT, dated 30/05/2014, effective on July 15, 2014: Regulation on underground water exploitation registration, form of dossier for grant, extension, adjustment and re-grant water resources license.

Environmental Measures
How to follow the regulations?

- Manage sources of discharges according to regulations.
  - Classified *(Normal solid waste, Hazardous waste and the hazardous waste processors, Waste water, Smoke)*
  - Store
  - Register (hazardous waste)
  - Transfer and/or reuse

- **Reporting**
  - Environment monitoring report
  - Hazardous waste management report
  - Waste water management report

- **Pay environmental fee**
How to operate sustainably

- SAVE (energy, paper, water, materials…)
- Change technology to sustainable materials
  - Nature fibers (Cotton, wool, hemp, bamboo, flax, cashmere, angora, leather..).
  - Use materials from sustainable sources/supplies
  - Use biodegradable materials
- Environmental friendly choice
  - Strictly controlled use of phosphates to reduce green house gases.
  - Use biodegradable detergent
  - Low level or sodium free chemicals
  - Do not carry out bleaching process releasing AOX (Adsorbable Organic Halides) emissions
  - Do not use heavy metal and formaldehyde in chemical processing, such as chromium
  - Do not use carcinogenic, mutagenic or any dye that is toxic to reproduction.
Greening office and green life

- SAVE
- Reuse
- Reduce
- Recycle

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- Shopping friendly
- Eating friendly
- Travel friendly
- Fashion friendly

NO PLASTIC or Biodegradable one
Shoping friendly
Eating friendly
Travel friendly
Fashion friendly
Your initiatives?
Thank you!

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