

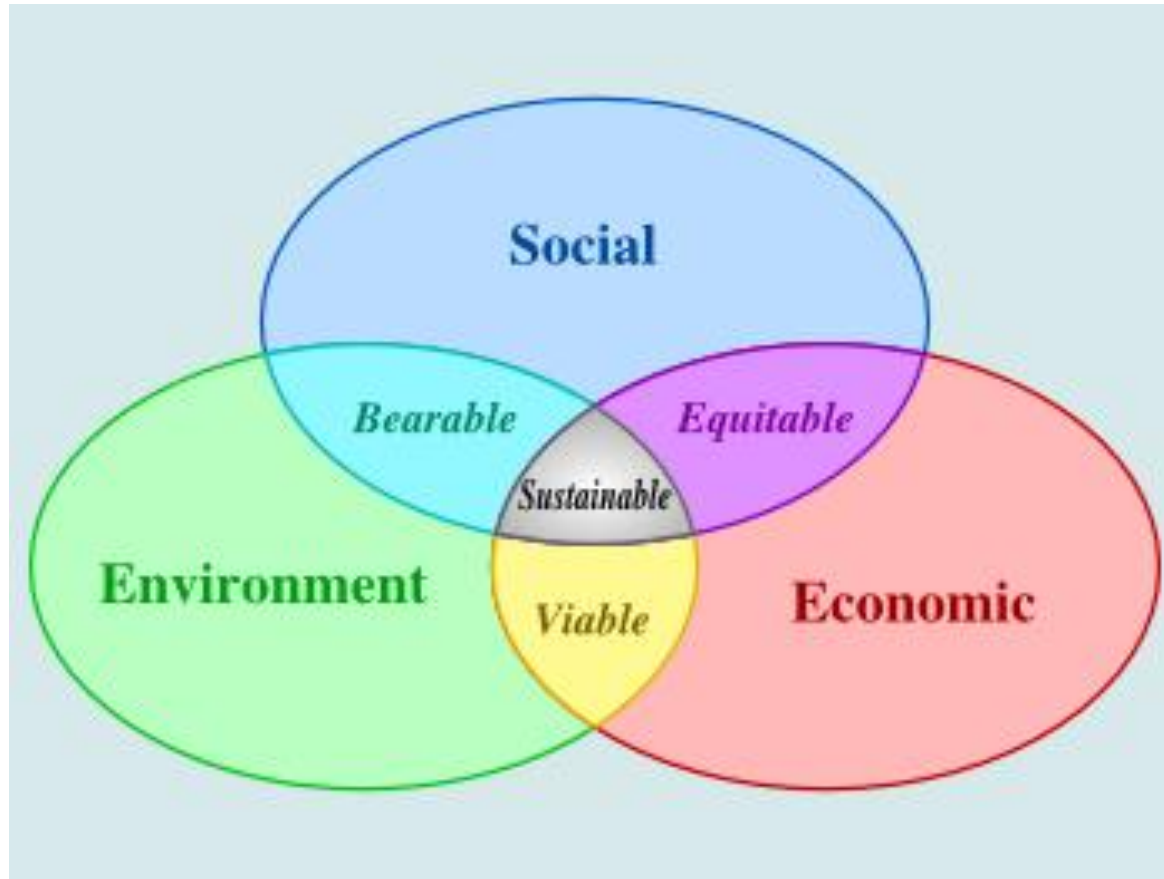


Ultimate Goals of the Sustainability Task Force

Sustainability will be:

- Incorporated into Strategic Initiatives
- Part of the student learning outcomes
- Required for graduation
- Used in the selection of new faculty

Sustainable Development



Economics

NEW, FASTER COMPUTERS = ↑ PRODUCTIVITY?

What do we do with the old computers?



Electronic waste from developed countries is exported to Ghana, China, Vietnam, Pakistan and other low income countries



Economics

“I cannot run as I used to...
I cannot run very well”

Alex (13 years old)

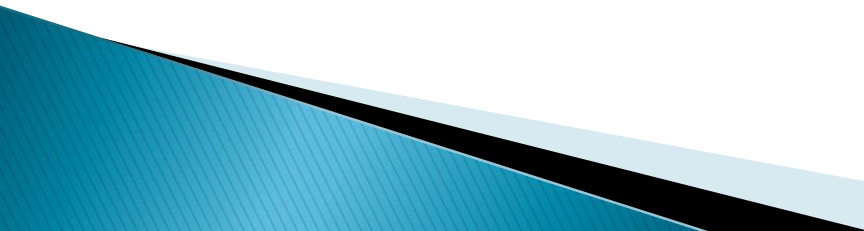
“The Lagoon is totally dead because of the toxic materials that are flushed into it whenever it rains. Ten years ago, the Odaw River was teeming with fish. It was a source of livelihood for a lot of people”

Mike Anane (Journalist)

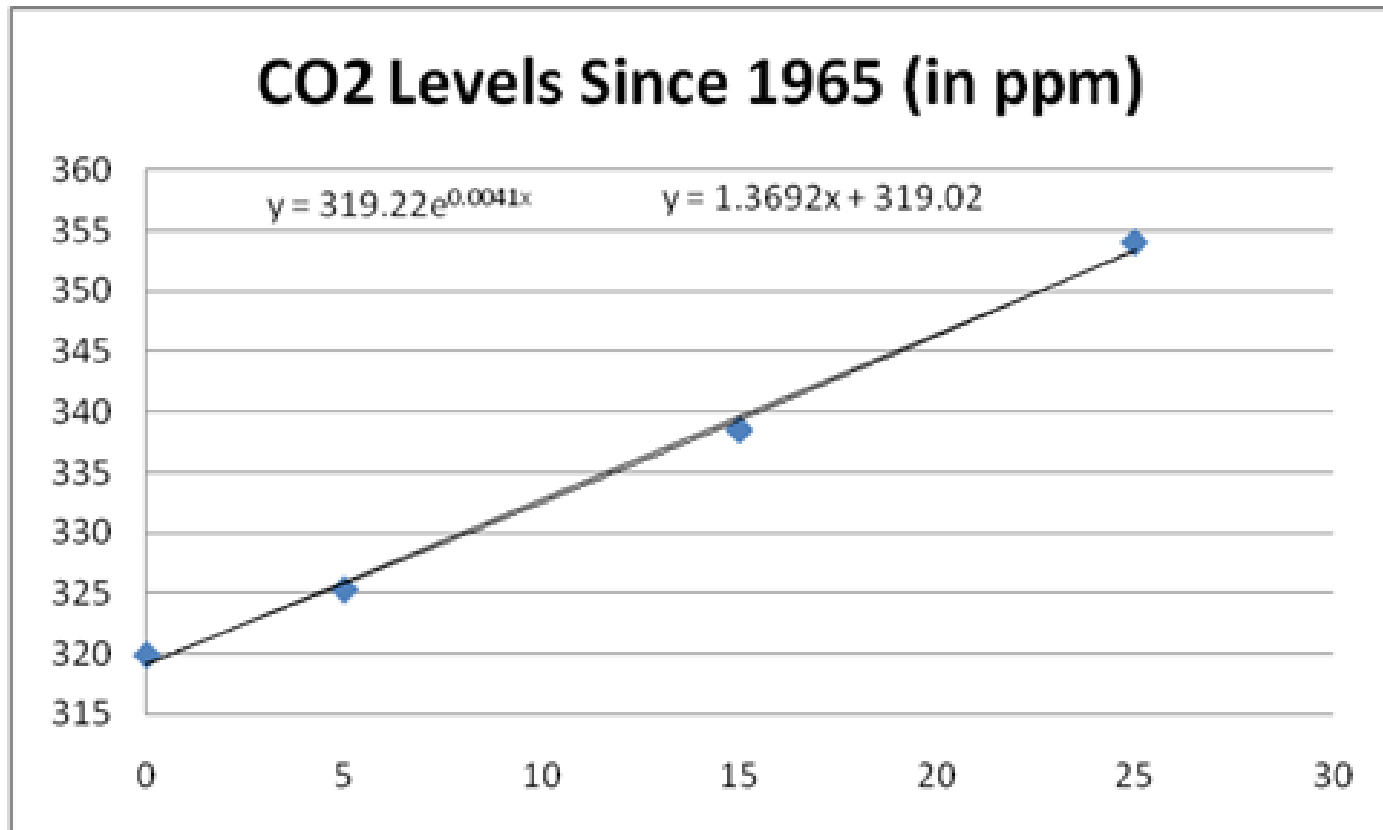
▶ POOR HEALTH = ↓ PRODUCTIVITY

▶ POLLUTED WATER = ↓ PRODUCTIVITY

Math 95

- Per capita daily oil consumption:
US (~3 gals) China (0.25 gals) India (0.11 gals)
 - Nearly 50% of US electricity comes from coal
 - Coal is abundant and cheap, but dirty
 - Industrial sector consumes 94% of all electricity produced.
 - CO₂ levels have risen over time and correlate to the industrial revolution
 - US production/consumption vs. China
 - Make predictions related to sustainability based population growth models
- 

Math 95

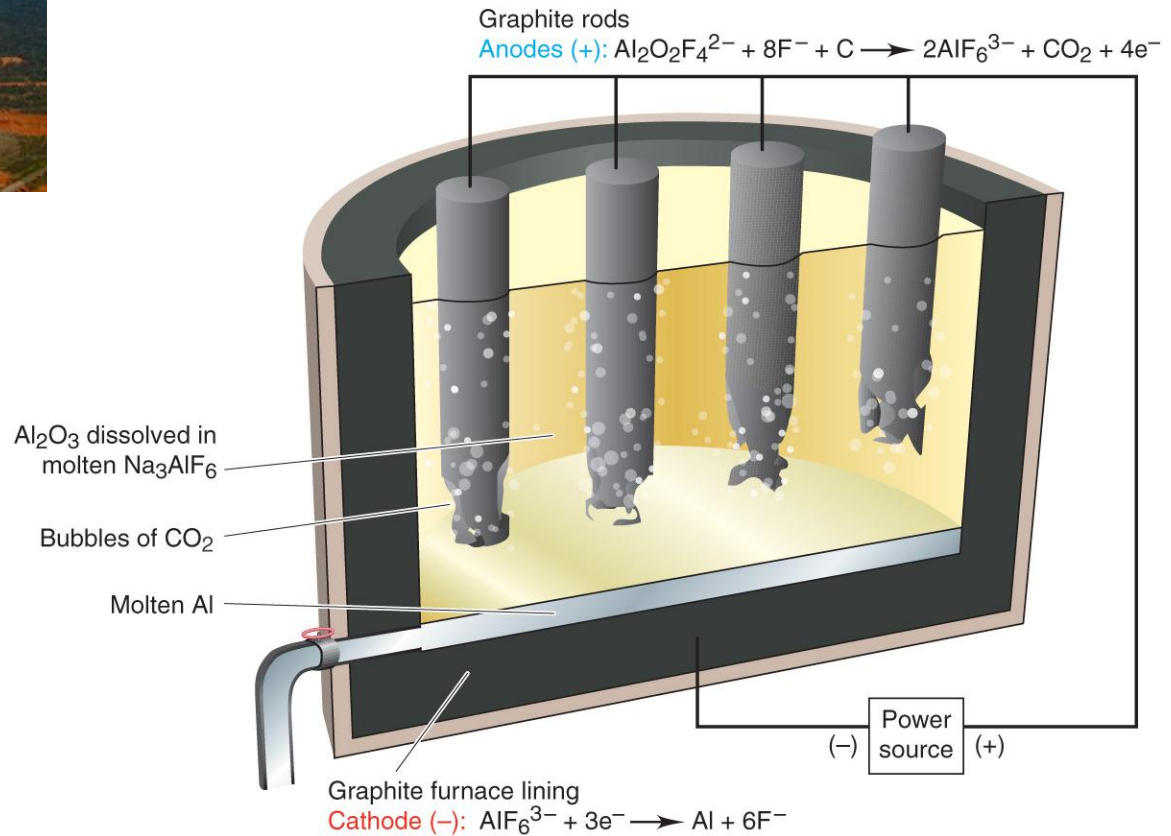


Chemistry

Mining and Refining Bauxite for Aluminum



Luis Castaneda/Getty Images
An aerial view of a bauxite mine and alumina processing plant in Australia.



Chemistry

Students:

- Calculate the energy to create a single aluminum can:
Electrolysis = 200 kilojoules per can = 0.0556 kW hr per can
- Compare their result to the energy to recycle a can:
Recycling = 13 kilojoules per can = 0.00361 kW hr per can

Electrolysis uses 15 times more energy than recycling

- Discuss that the calculation does not include the energy to mine and transport the bauxite
(total energy is ~3000 kilojoules per can)

Recycling is 99% more efficient than mining and isolating Aluminum from bauxite.

ESL

Student Needs

- Life skills: reading bills & saving money
- Writing paragraphs
- Grammar: future tense
- Improved English

Class Objectives

- Vocabulary development
- Grammar: comma use, conditionals (if..., then...)
- Stating opinions
- Improved reading, writing, speaking, listening, grammar & computer skills

Sustainability Unit



ESL



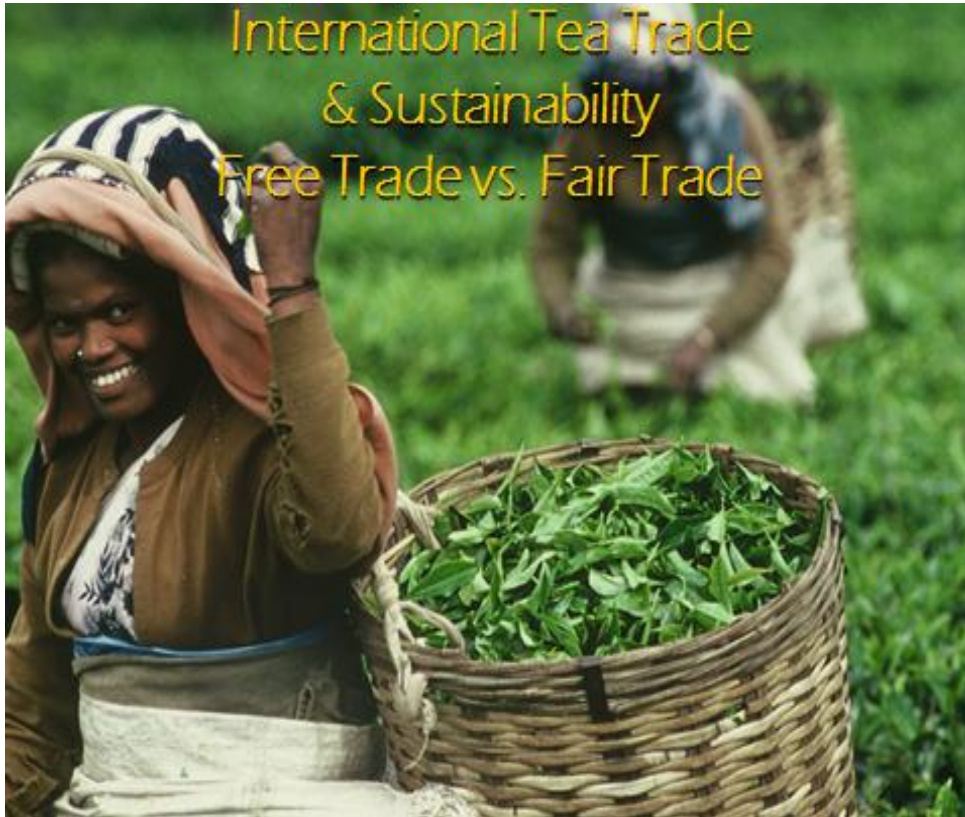
Which is better for:

- Health?
- Finances?
- Environment?

Sustainability Activities:

- Reading Skills & Vocabulary Development
- Grammar Practice
- Writing
- Computer Lab
- Speaking & Listening
- Life Skills

Business



Free Trade

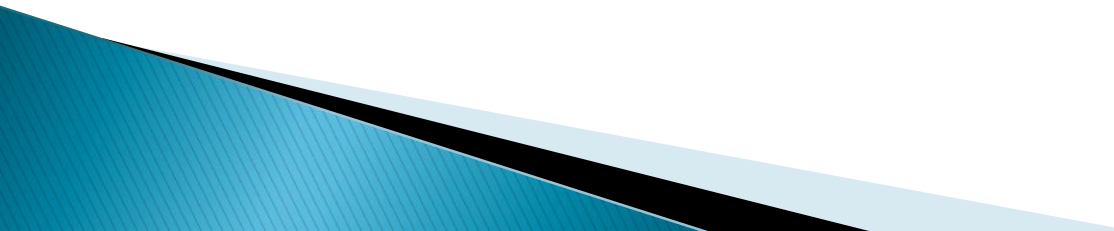
- Around 80% is bought by 3 large global corporations
- For every \$1 you pay, 15 cents goes to the growers

Fair Trade

- 50 cents to country of origin to help establish sustainable practices
- Benefits: decrease in poverty rate, better schools and health care

Business

Teaching Goal

- Incorporate sustainability across *all my* classes based on the assumption that **sustainability** is something more than environmental improvement...it is a new paradigm shift.
 - **People, Planet and Economics** are equally important components of **sustainability**.
- 

What's next?

Continue the conversation

Sustainabili-Tea

Learning & Teaching Center

March 4, 2010 2:00 pm

Get started now!

One-on-one help available from your colleagues
on the Sustainability Task Force.

