



UNITED NATIONS  
DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  
STATISTICS DIVISION

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## **Seminar**

### **Addressing Information Gaps in Business and Macro-Economic Accounts to Better Explain Economic Performance**

**New York, 23 – 24 June 2008**  
United Nations, Conference room C

**Addressing gaps in environmental accounts**  
**Tarcisio Alvarez-Rivero**



# **“ Addressing Gaps in Environmental Accounts “**

**Tarcisio Alvarez-Rivero  
DSD / UDESA**





- **1998 CSD**
- **1999 creation of the EWG on EMA**
- **1999-2006 EWG on EMA met 9 times**
- **2000 Start of EMARIC**
- **2003-2005 creation of EMAN chapters to add to n EMAN EUROPE**
- **2005 IFAC Guidance on EMA published**
- **2006 EWG on EMA seizes operations**
- **2007 First EMAN global meeting**
- **2008 proposed ISO 14001 series standard**



## **CSD decision 6/3 (1998)**

**Encouraged UNDESA and other organizations to study the factors that influence company decision making such as economic competitiveness and environmental management , including the adoption of best practices.**

# What is EMA



- EMA is broadly defined to be the identification, collection, estimation, analysis, internal reporting and use of physical flow information (i.e. materials, water, and energy flows) , environmental costs, and other monetary information for both conventional and environmental decision making within and organization



# EMA

Simply doing better more comprehensive management accounting

The focus is no longer to assess the total “environmental costs” but on a revised calculation of production costs on the basis of material flows



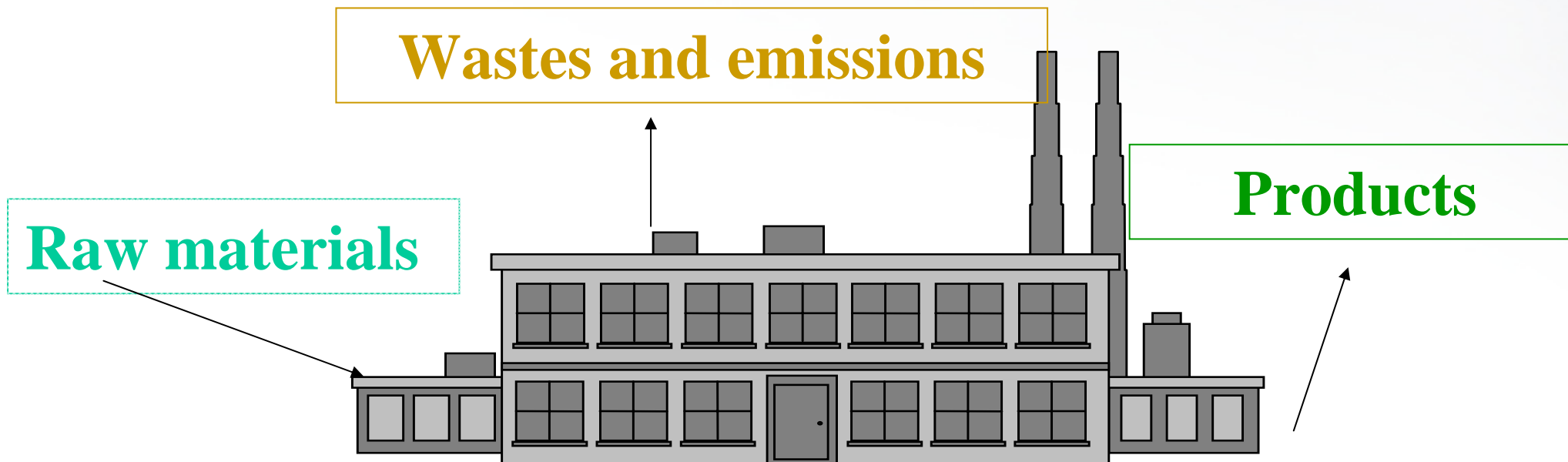
Disposal and treatment costs

Liability and contingency overhead costs

Wasted materials purchase costs

Production costs of wastes and emissions

Material inventory losses





# EMA for what?



The first reaction is

**EMA identifies new revenue and cost streams related to material flows and thus allows for better investment decisions**

But I like to put this differently.

**EMA allows management to realize that the current materials flow of the company is too expensive and thus must be reduced to improve financial performance**

*or*

**That producing waste / emission up to the level allowed by law may be too expensive for the firm and that going beyond may be the only financially responsible course of action**

# Benefits to governments of EMA use by industry



- 1) Lower financial, political and other burdens of environmental protection, regulation and enforcement on government due to the fact that industry would avoid waste on the basis of self interest
- 2) Strengthen the effectiveness of existing government policies/regulations by exposing to companies the true of costs of these regulations.
- 3) Improved policy design by showing to government the true cost to industry of government policy options
- Drive company internal demand for cleaner solutions due to business and not environmental reasons – continuous improvement
- 5) Better information in order to manage resource use and ecosystems
- 6) EMA can be used by government agencies themselves to improve their indirect and direct impacts on the environment – UK EPA case

# SEEA and EMA



- SEEA / CEPA focuses on corporate activities in specific environmental media
- The IFAC Guidance uses the same environmental media but does not use them as base but begins from the corporate cost / activity centers
- There are inconsistencies in SEEA in dealing with preventive approaches. It mostly focuses on end of pipe activities which in turn contradicts the current shift towards preventive approaches in industry.
- SEEA currently captures a mistaken picture of corporate activity by leaving out most preventive expenditures. The numbers today show a decrease in environment related expenditures which could not be further from the truth.
- SEEA treats environmental protection as a “satellite system’ and not as a core part of corporate management as does EMA

# What does this mean to Statistical Offices



- Change in focus
  - Recognize the need to open the SEEA to a new (currently more prevalent) class of activities.
- Send correct message through information requests
  - Gov't information requirement send a signal to companies as to what info is important. (Japanese EMA approach – MCA)
  - Drive improvement through awareness through use of information
- Validate information in NACE Codes and IO databases Danish example
- Provide consistency between SEEA/CEPA and corporate accounting methods – problem of transnational corporations.
- Reliable industry aggregates : “Industrial contribution to society”. Based on LCAs / Supply chain – Korean example
- Improved quality of information and thus government decision making and resource management information
- Increased reliance on hard data for decisions (less dependence on models)

# What can be done



- It is really up to you to take advantage of this opportunity
- The information is difficult to gather since it is management accounting but there are obvious benefits to having it
- The challenge is how to ask the questions to get meaningful information and for what?
- Luckily there is some experience
- There must be monitoring to make sure the information is useful in the format received and also that companies and governments are reacting to it