

2<sup>nd</sup> Tripartite President Meeting: NIES, NIER, CRAES

## Evaluation Process of NIER Research Activities

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National Institute of Environmental Research



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## I. Three Major Types of Researches at NIER

### 1. Basic Research (調查研究)

- ◇ Regular Budget : Planned in previous year
- ◇ 19 division and 5 labs: compulsory (more than one project)
- ◇ Fundamental Research: Total 33 projects (2004)
- ◇ Budget: 1,580 M Won (~ \$1.3 M)

## I. Three Major Types of Researches at NIER

### Examples of NIER Basic Research

- ◇ Study on the Generation Mechanism and Emission Characteristics of Hexachlorobenzene from Major Stationary Sources  
(主要 排出原別 Hexachlorobenzene 發生機轉 排出特性 研究)
- ◇ Development of Management System of Hazardous Air Pollutants Emission  
(有害 大氣污染物質 管理system開發 研究)
- ◇ Control of Protozoan Oocysts in Water Treatment Facility  
(淨水場 原生動物 Oocysts 制御 研究)

## I. Three Major Types of Researches at NIER

### 2. MOE Projects (政策研究)

- ◇ Irregular allotment of MOE budget
- ◇ Urgent national environmental issues or need for policy development
- ◇ Total 20 projects(2004)
- ◇ Budget: 6,218 M Won (~ \$5.1 M)

## I. Three Major Types of Researches at NIER

### Examples of MOE Projects (政策研究)

- ◇ Risk assessment of mass produced chemicals controlled by OECD
- ◇ National Nature Environment Survey
- ◇ Atmospheric HAPs monitoring project
- ◇ Study on vehicle emitted Green-house gas mitigation measures

## I. Three Major Types of Researches at NIER

### 3. Priority Research Projects(主要事業)

- ◇ Planned previous year
- ◇ Requires national priority and attention
- ◇ Mostly long-term projects: more than 1 year
- ◇ 7 projects(2004): 4,853 M Won (~ \$4 M)

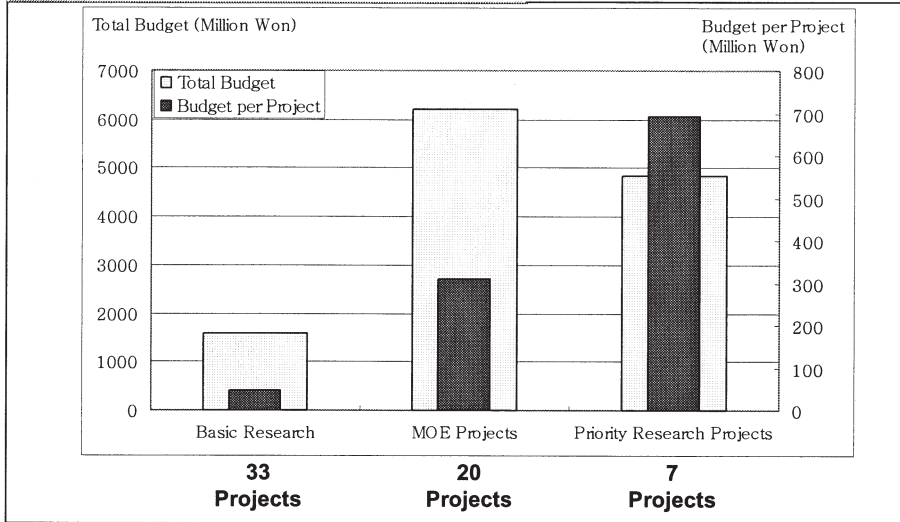
## I. Three Major Types of Researches at NIER

### List of 2004 Priority Research Projects(主要事業)

- ◇ Monitoring of EDCs (Endocrine Disrupting Chemicals) in Korea
- ◇ Epidemiological survey on Env'l pollutant exposure & health effect in industrial complex
- ◇ Research on the photochemical ozone & particulate control in metropolitan area
- ◇ Establishment of air pollutants monitoring system & cooperative program for env'l conservation of North-east Asia
- ◇ TMDL technical support project
- ◇ Drinking water management system
- ◇ Survey of organic waste generation raw unit

## I. Three Major Types of Researches at NIER

### Comparison of Research Budgets(2004)



## II. Research Evaluation Process

### 1. Internal Evaluation

#### ◇ Research Advisory Committee (研究管理委員會)

- Highest board
- Members: senior members nominated from academia, industry and environmental communities
- Role:
  - to advise on the budget and plan of the comprehensive research projects of NIER
  - to assess the outputs of entire NIER research projects

## II. Research Evaluation Process

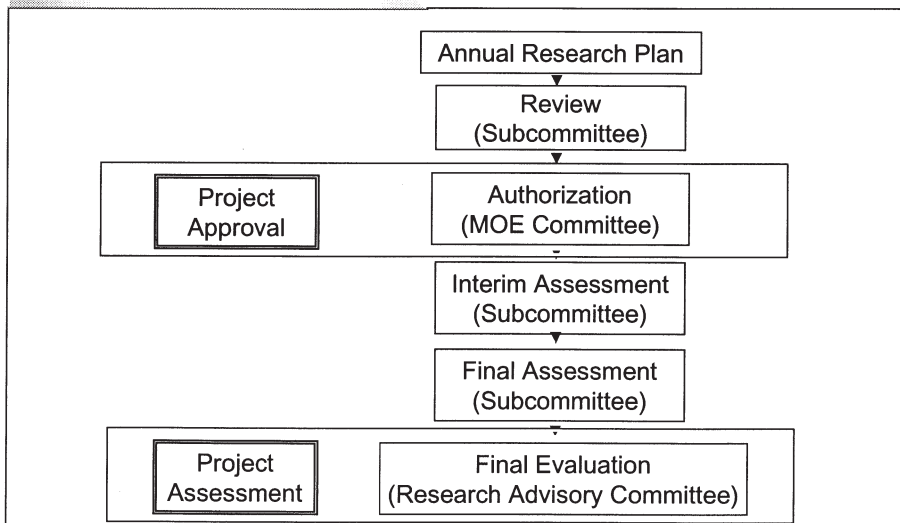
### 1. Internal Evaluation

#### ◇ Subcommittee (分科委員會)

- 13 subcommittees
- Member: Less than 15 experts in their respective fields
- Occasion: meets twice a year
- Role:
  - to assess the progress of Basic Researches and
  - to evaluate the outcomes in light of the initial mission statement

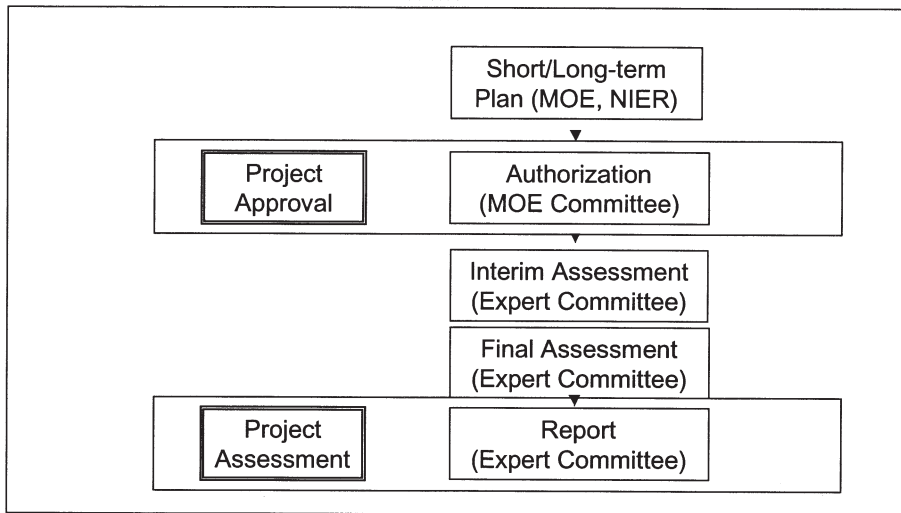
## II. Research Evaluation Process

### Basic Research (調查研究)



## II. Research Evaluation Process

### MOE Projects (政策研究)



## II. Research Evaluation Process

### 2. National Assessment Process

- ◇ Survey, Analysis and Evaluation of National R&D Programs  
(國家研究開發事業 調查·分析·評價)
  - Aim: S&T planning and evaluation at the national level  
- includes the pre-coordination function of the national R&D budget
  - Governing Body: National Science & Technology Council (NSTC)
  - Authorized Institution: Korea Institute of S&T Evaluation and Planning

## II. Research Evaluation Process

### 2. National Assessment Process

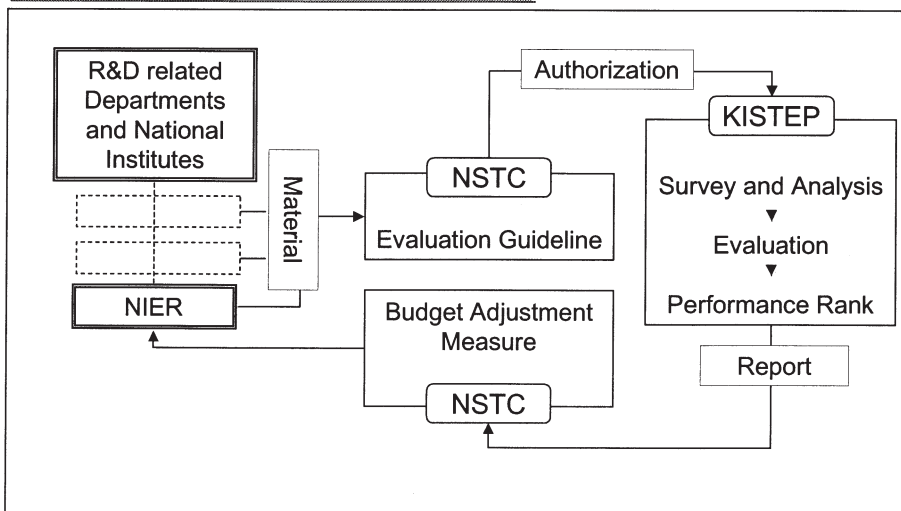
◇ Survey, Analysis and Evaluation of National R&D Programs  
(國家研究開發事業 調查·分析·評價)

• Key indices for the assessment:

- degree and extent of policy support activities,
- law (guidelines) formulation,
- scientific paper,
- spin-off products (such as patent, business creation),
- training,
- international cooperation,
- research foundation establishment,
- social and economic contribution

## II. Research Evaluation Process

### National R&D Evaluation Process





## II. Research Evaluation Process

### 2. National Assessment Process

- ◇ Survey, Analysis and Evaluation of National R&D Programs  
(國家研究開發事業 調查·分析·評價)
  - Benefits: Improvement of competitiveness and productiveness
  - Irony: Compete with other national research institutes with *different missions and roles*

## III. Future Challenge of NIER

### Need for Innovative Mission Statement

- ◇ Balancing the two different tasks
  - as a national institution that places non-profit and policy underpinning mission first
  - as a research institute that should be creative and free in its research environment

