



**Economic Commission for Europe**

**ENERGY POLICY IN ECE REGION**

**POLICY FORUM:  
FORESTS, WOOD AND ENERGY  
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**Division for Industrial  
Restructuring, Sustainable Energy  
and Enterprise Development**

# CONTENTS

- **Policy objectives: major drivers**
- **Market opening & liberalization**
- **Environmental policy trends**
- **Energy security**
- **Implications/ Concluding remarks**



# ENERGY POLICY OBJECTIVES; MAJOR DRIVERS

- **Energy security**
  - uppermost in 1970s & early 1980s
  - “raison d’être”
  - re-emergence on policy/public agenda
- **Economic efficiency**
  - aim of current market liberalization
- **Environmental protection**
  - required element



# MARKET OPENING & LIBERALIZATION (1)

## Aim

- to enhance overall economic efficiency through competition

## Paradox

- market structure
  - real atomistic competition unlikely
  - Reconsolidation/ concentration
  - fewer, larger firms in larger market



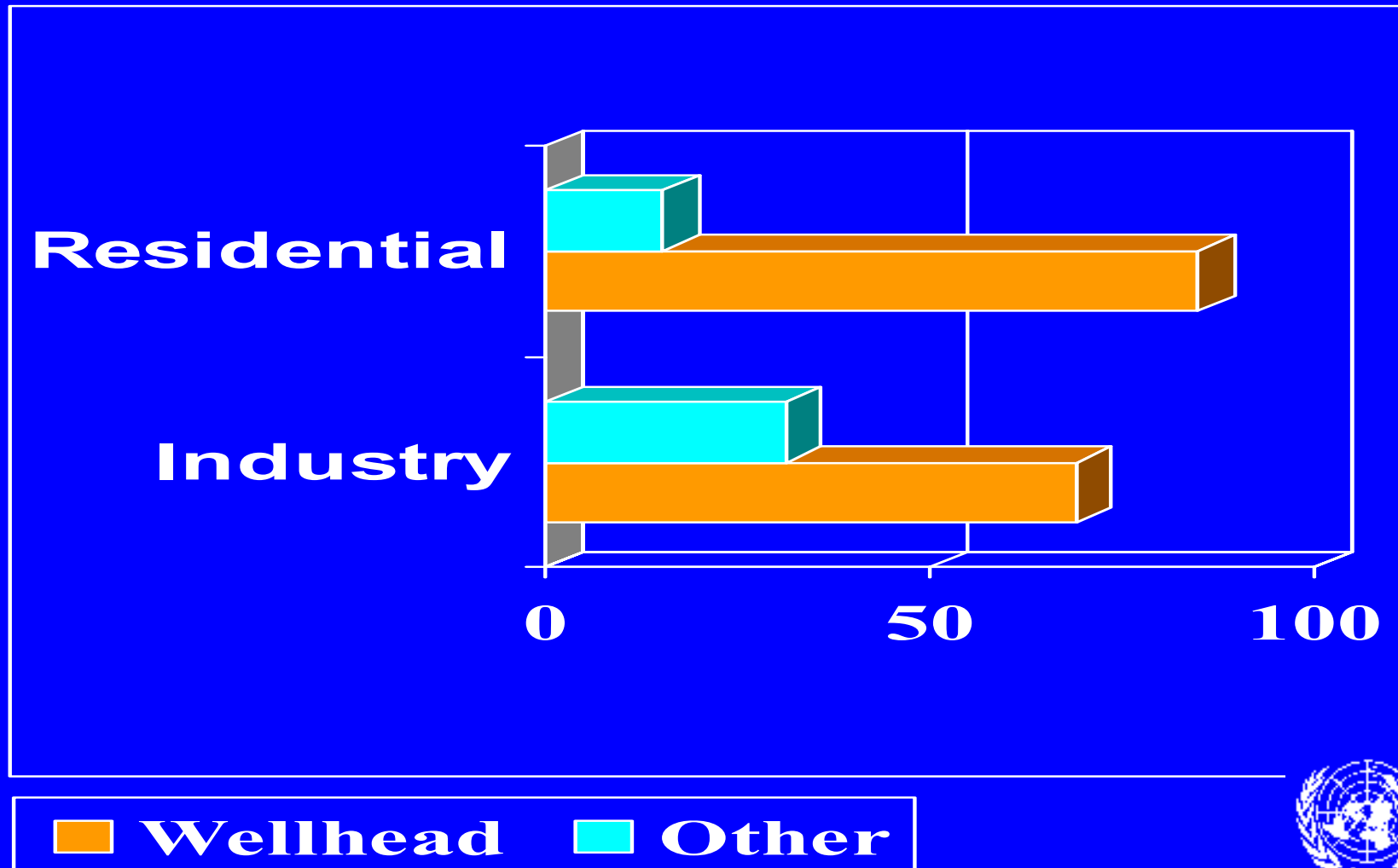
# MARKET OPENING & LIBERALIZATION (2)

## Dilemmas & concerns

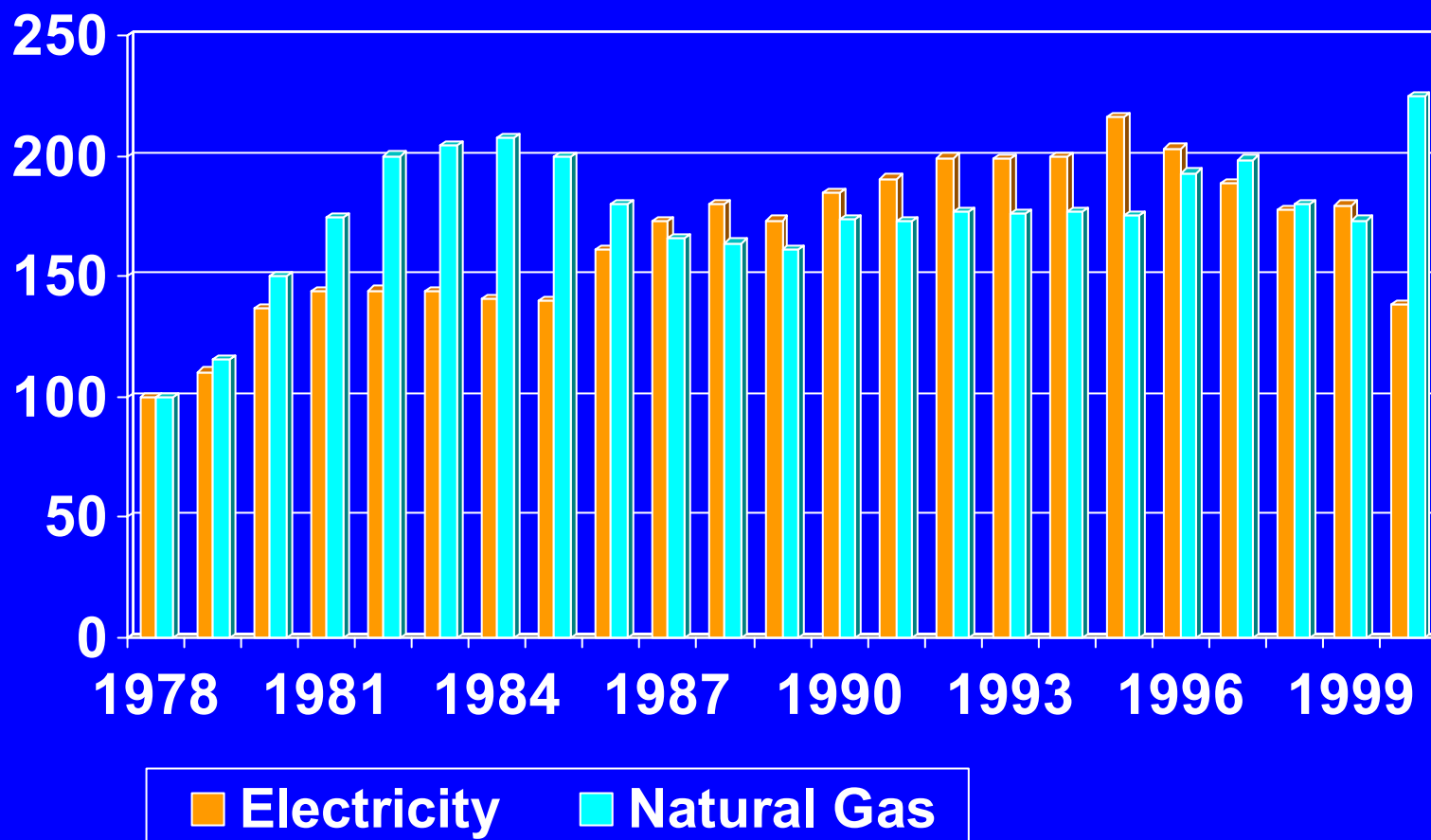
- **Prices & margins**
  - sources of enhanced efficiency
  - increased efficiency vs lower prices
- **Investment**
  - overcapacity/financial difficulties
  - uncertainty leading to delay/pause
- **Different starting points**
  - economies in transition



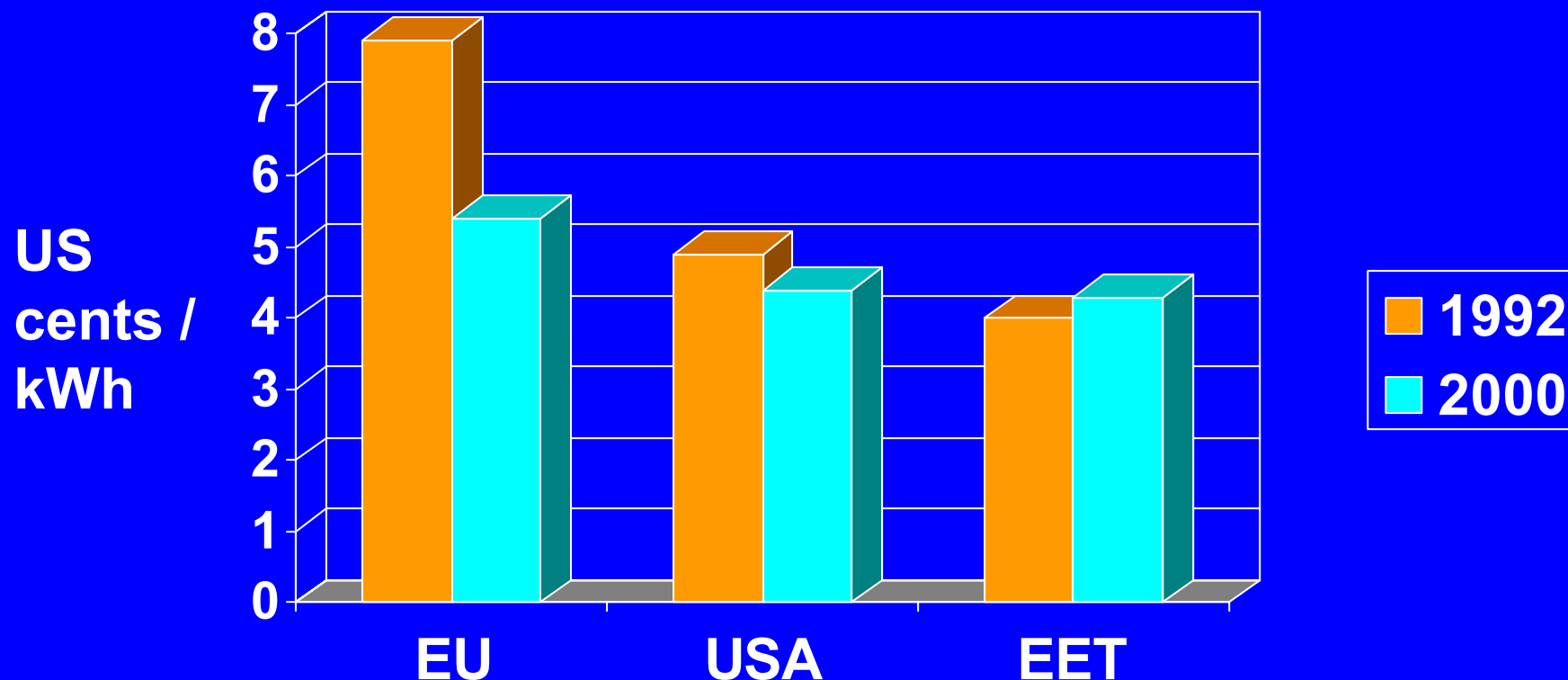
# DECOMPOSITION OF GAS PRICE DECREASE, USA, 1984-95



# ELECTRICITY AND GAS PRICES, OECD COUNTRIES 1978-2000, 1978=100



# ELECTRICITY PRICES IN INDUSTRY, 1992 and 2000



Source: OECD/IEA Prices & Taxes, 2001; and national data provided to UNECE



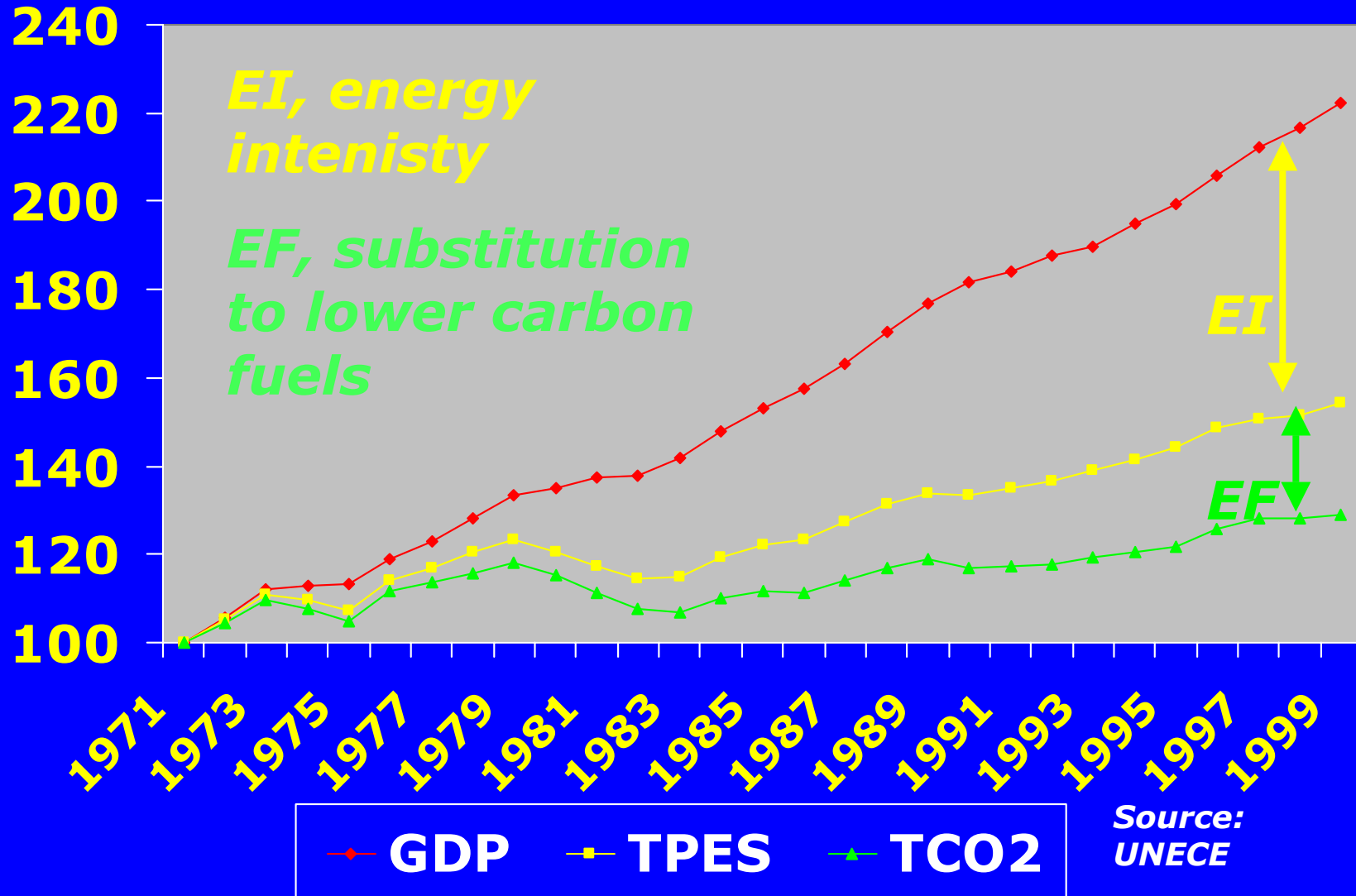


# ENVIRONMENTAL PROTECTION TRENDS

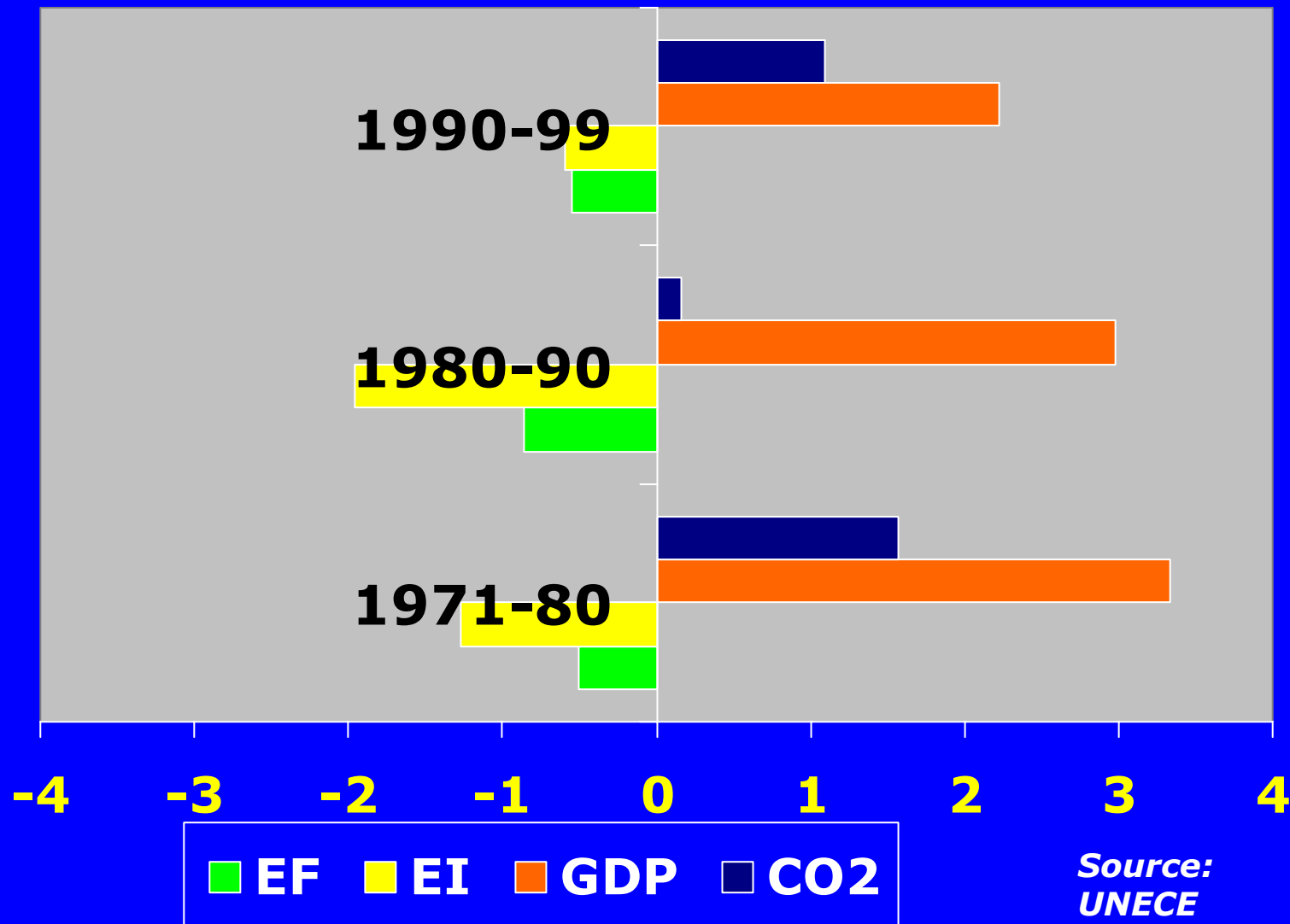
- **Energy sector progress good**
  - however, still much to be done
- **Implementation rate slowing down**
  - despite policy preoccupation
- **Climate change of most concern**
  - existing targets difficult to achieve
  - emission trading beneficial to some countries



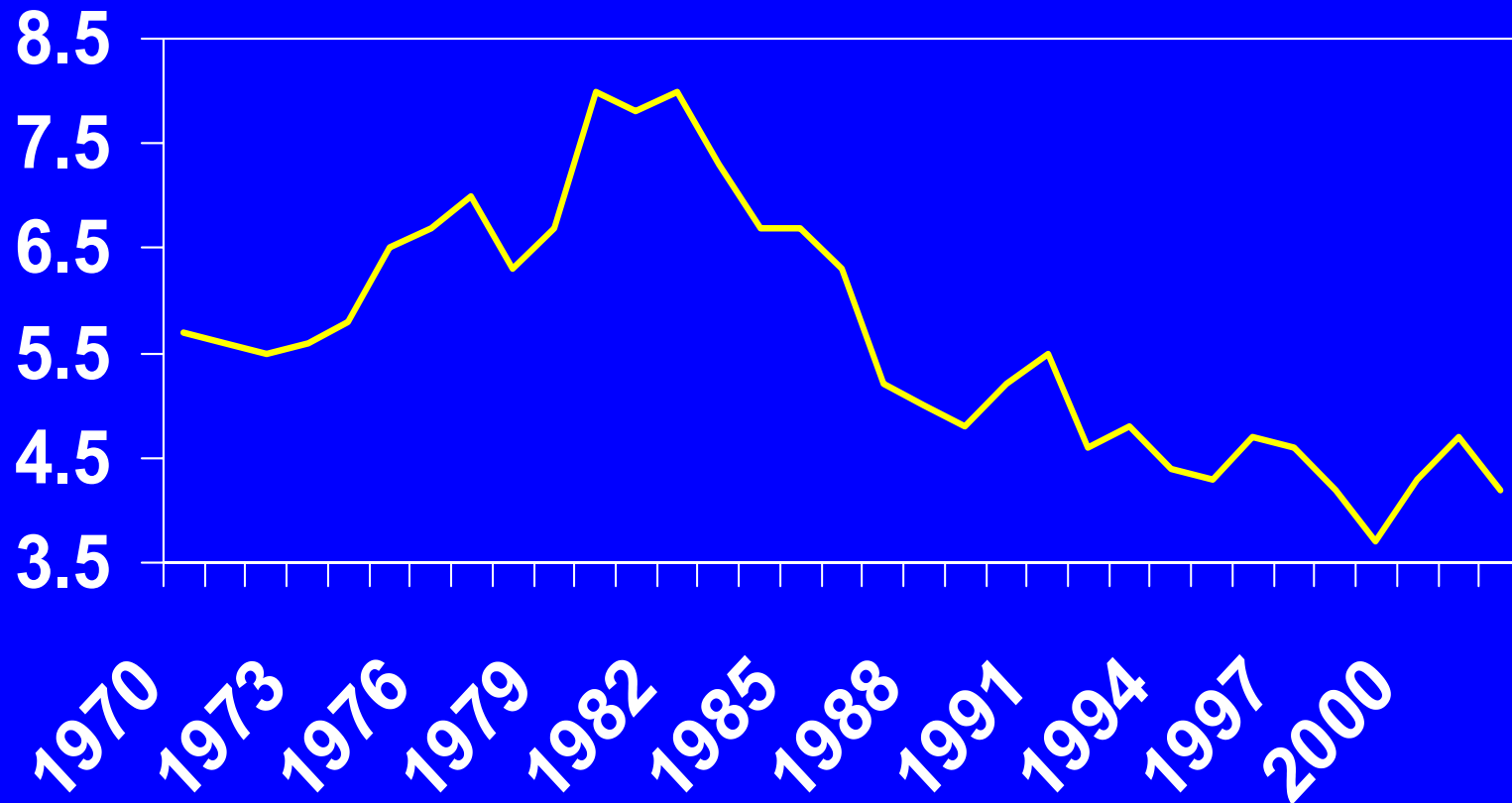
# GDP, TPES & CO<sub>2</sub>, WE, 1971-99



# Decomposition of CO<sub>2</sub> emissions growth, 1971-99, WE



# ENERGY EXPENDITURES TO DISPOSABLE INCOME, WESTERN ECONOMIES, %



Source: IMF,  
Datastream



# ENERGY SECURITY (1)

- **Energy fundamentals reverting back to 1970s/ early 1980s (even if conditions not the same)**
  - **Increasing import dependence**
  - **Concentration of production/reserves**
    - **petroleum & gas**
  - **Growing reliance on Middle East oil**
    - **political/social instability**



# ENERGY SECURITY (2)

- **Investment risks & uncertainties**
  - increasing share of production outside Western Economies
  - impact of market opening
- **Longer supply routes**
- **Terrorism**
- **Full implications of market liberalization unclear**



# IMPLICATIONS (1)

## Fossil fuels

- Medium term: increased use of gas
  - Emerging global market (LNG)
- Longer term: cleaner coal/ oil technologies
  - hydrogen & carbon sequestration
- Mainstay of energy supplies

## Nuclear power

- Continuing pause in development
- Important element of diversity

## Renewables

- Increasing but not panacea



# IMPLICATIONS (2)

## Market structure

- Consolidation
- Larger companies in electricity and gas
- Larger competitive regional markets

## Uncertainties

- Investment climate
- Policy response to climate change issue

