BEHAVE – Evaluation of Energy-Related Behaviour Change Programmes & Projects

NEW INSIGHTS FOR ENERGY FROM SOCIAL RESEARCH

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NEW INSIGHTS FOR ENERGY FROM SOCIAL RESEARCH

- Introduction: Energy as social issue
- A new approach: Towards a Sociology of Energy
- Main theories about social origins of environmental problems
- New insights: the **Lifestyles Social Practices Model** and the **Social Practices of Domestic Consumption of Electricity**
- Some facts: **the Energy Eurobarometer**

INTRODUCTION

- **Energy is a Social issue**

1. Importance of energy from a technical standing point
2. Environmental problems
3. Domestic consumption and the need to energy saving

A NEW APPROACH: TOWARDS A SOCIOLOGY OF ENERGY

- Environmental problems are **multidimensional** and require **multidisciplinary approaches**
- The extraction, conversion, delivery, use and consumption of energy is as much a **social** and economic activity as a technical one
- Energy research in most countries is dominated by engineering and the natural sciences, and holds only a marginal position within the Social Sciences

SOCIAL SCIENCE APPROACHES TO ENERGY ISSUES

- Economics has paid much greater attention to energy issues than other social sciences. The current energy research agenda is dominated by economic questions.
- Energy occupies a far more marginal position within the other social sciences.
- The relevant activities developed in the other social sciences can be grouped into four disciplinary areas: *political science, international relations, social psychology and* ***sociology*****.**

THE SOCIOLOGICAL PERSPECTIVE

- The **Sociological perspective** could be applied to energy research topics as **household energy efficiency and domestic energy saving.**

- However, this kind of research is **clearly insufficient** in relationship with the magnitude of the social dimension of energy problems.

- This is despite the **potential** that appears to be offered by other established traditions within Sociology, including:

  - **Sociology of consumption**: which emphasises the importance of meaning, identity and symbolism in consumption practices;

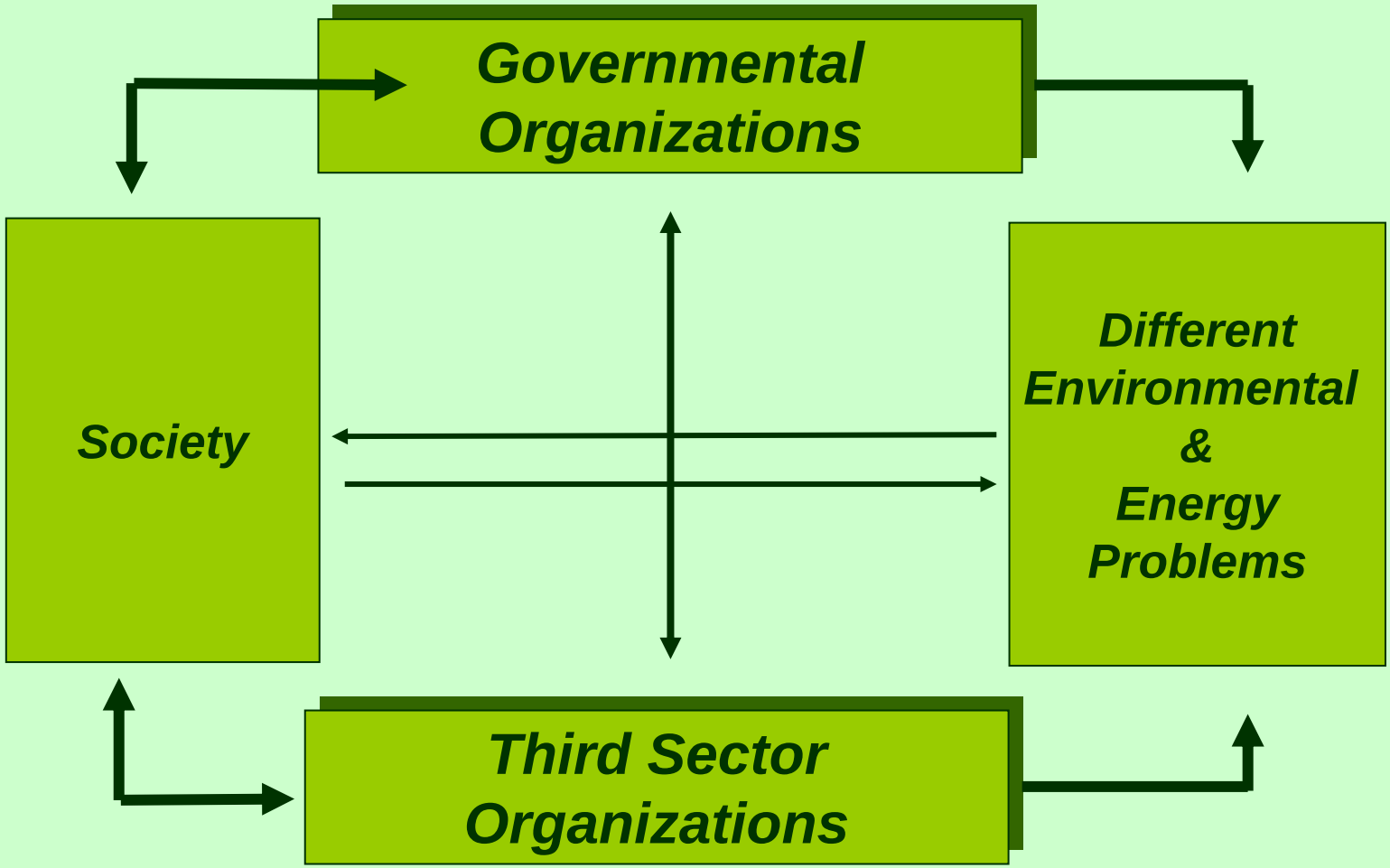
  - **Environmental sociology**: which includes research on environmental knowledge' and the role of consumers and social movements in achieving sustainability; and

  - **Sociology of science and technology:** which explores the social shaping of individual technologies and has the potential to extend this perspective to the evolution of larger technical systems.

WHAT ENERGY SOCIOLOGISTS DO?

- To define the **object of study** for the Sociology of Energy
- To position of the Sociology of Energy within the **academic field**
  - in relation to the environmental sciences
  - in relation to general social theory
- To characterize the **social roots of environmental problems** with the help of Sociology

OBJECT OF STUDY FOR ENERGY SOCIOLOGY



POSITION IN THE ACADEMIC FIELD

Environmental sciences

- Interdisciplinary character
- 'normative' orientation: help solving problems

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Energy Sociology in between

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General Sociology/ Social sciences

- Focus on issues of perception
- Focus on issues of consumption

THE IMPORTANCE OF THE ENERGY SOCIAL RESEARCH

- For including the **social dimension of energy**, complementing the traditional criteria essentially technical and economic
- For its dimensions both **theoretical and empirical**
- For its analysis of **energy social perception** and citizens-consumer environmental awareness.
- For its analysis of **social practices** in relationship with the energy and its consumption.

SOCIAL ROOTS OF ENVIRONMENTAL PROBLEMS

- **Environmental problems: Multi-causality has to be the rule**

- **Sociology** has tools to determine the **social factors** and dynamics behind environmental problems.

- Examples of **possible social causes** of environmental problems include:
  - population-growth (Ehrlich)
  - the dominance of anthropocentric views of nature (White; Shiva)
  - the rise of consumer-society (Bourdieu)
  - the inherent growth-dynamic of capitalism (Mol)
  - the globalization process (Castells, Giddens)

THEORIES ABOUT SOCIAL ORIGINS OF ENVIRONMENTAL PROBLEMS

- There are different theories to explain the social origins of the environmental problems, but only focus in one aspect.

- We can categorizing them into four main groups, based on the distinctions between
  - **cultural** and **structural** dimensions of social systems
  - **macro-** or **micro-** level approach to the system

CULTURE AND STRUCTURE AS TWO DIMENSIONS OF SOCIAL SYSTEMS

Culture

- The **cultural aspect** of social systems refer to the role of **norms, values, opinions** in the reproduction of the system.

  Example: religion; political conviction; opinions on the role of tradition, etc.

Classical debate between **WHITE- MONCRIEF** in the 70's about the social causes of environmental problems

Structure

- The **structural aspect** of social systems refer to the **composition,** the **socio-economic rules** which govern the reproduction of the system.

  Example: power-structure; relation market-states-civil society; level of urbanization, etc.

The **neo- Marxist Theories** about structural factors as social causes of environmental problems:
-**Theory of Treadmill of Production**
- **Theory of Counter- Productivity**

‘MACRO’ AND ‘MICRO’ AS TWO LEVELS OF ANALYSIS IN THE STUDY OF SOCIAL SYSTEMS

Macro-level

When studying a social system at the **macro-level,** the emphasis is on the **long-term development** of the system as a whole.

Theories focused in cultural and structural factors are an example

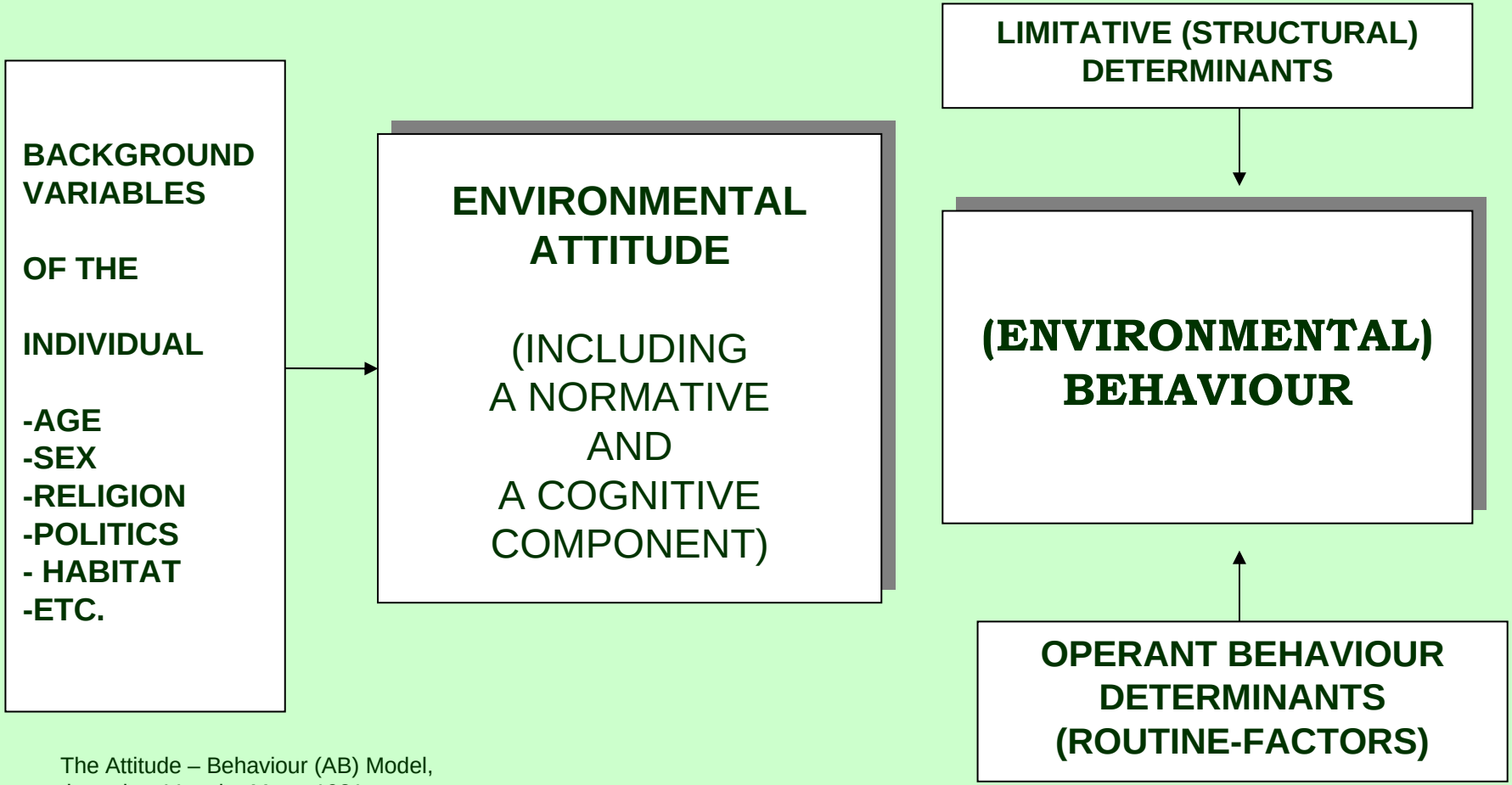
Micro-level

When studying a social system at the **micro-level,** the emphasis is on the **here and now of everyday life** (e.g. shopping for sustainable products at the food-store).

- **Attitude – Behaviour Model** (FISHBEIN & ATZJEN)
- **Rational choice theory:** the Tragedy of the Commons of HARDIN

THE ATTITUDE – BEHAVIOUR (AB) MODEL

(FISHBEIN & ATZJEN, 1975)



The Attitude – Behaviour (AB) Model, based on Van der Meer, 1981.

EMPIRICAL RESULTS OF THE ACTITUDE-BEHAVIOUR MODEL

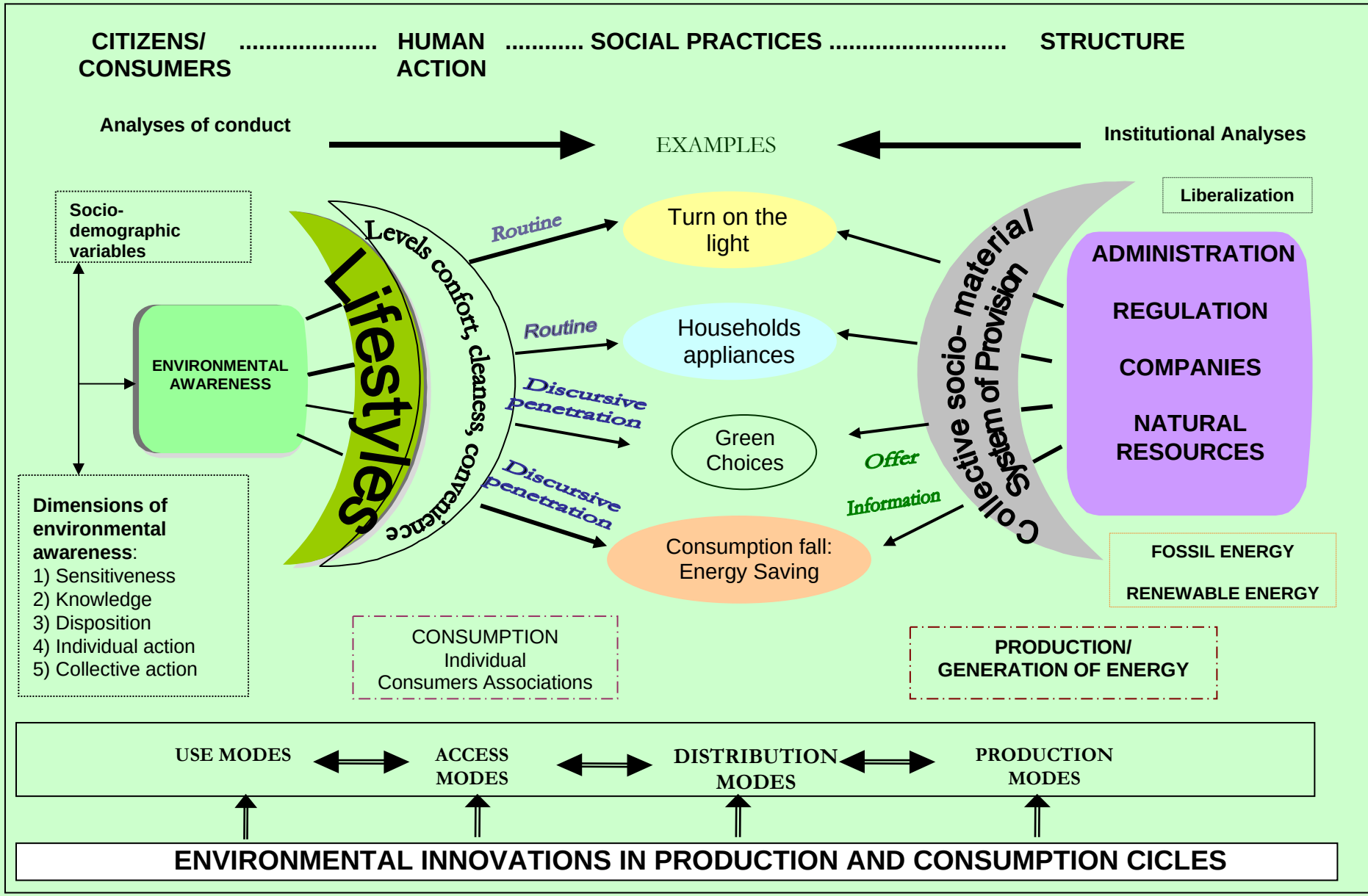
- The A- B Mode has been dominant for a pretty long time in the environmental social science research.
- 90's: Criticism to the empirical results because the relationship between **attitude** and **behaviour** is not proved: when a high level of awareness was found, this did not predict actual environmental behaviour in a reliable way.
- **People with the 'right' attitude still made the 'wrong' choices.**
- The Model is 'weak' in analysing the broader social context in which individuals operate: is weak on structure.
- It is necessary to include the **role of social structure in the analyses of individual behaviours.**

NEW INSIGHTS IN ENERGY SOCIAL RESEARCH

- Towards an integrative model: the **LIFESTYLES-SOCIAL PRACTICES MODEL** of Spaargaren.

- The focus is social, cultural and collective **practices.**
- **Decision-making** is determined by **social and cultural norms and conventions**
- Social scientific **theories of consumption** are relevant for understanding energy
- The appropriate focus is **changing conventions of comfort, cleanliness and convenience**
- **Producers and consumers** are implicated in the evolution of demand – technologies, infrastructures, routines and habits co-evolve.

THE LIFESTYLES- SOCIAL PRACTICES MODEL

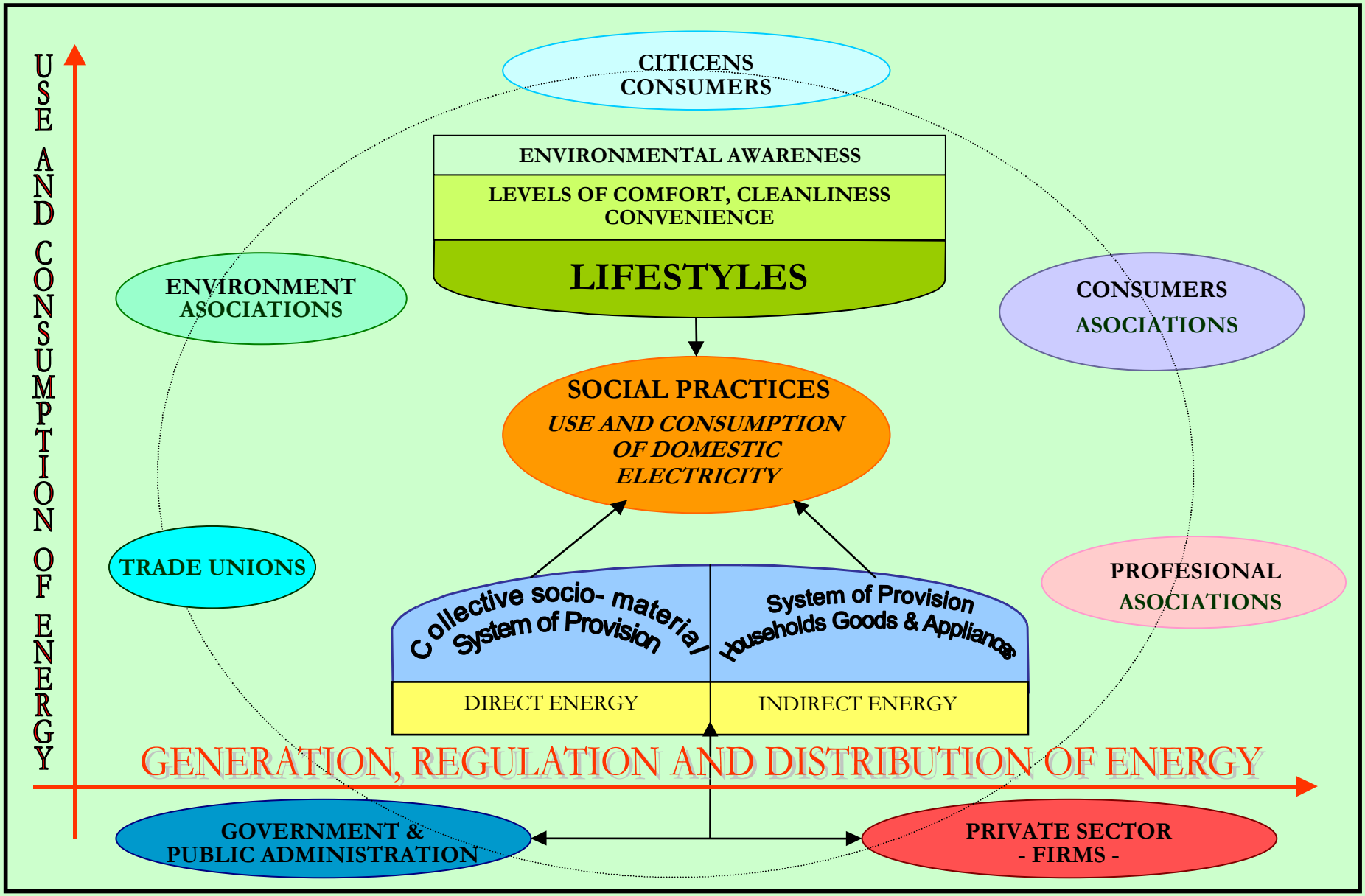


BALARI, C., Adapted from SPAARGAREN.

MAIN CONCEPTS OF THE MODEL

- SOCIAL PRACTICES & LIFESTYLE
- LEVELS OF COMFORT, CLEANLINESS & CONVENIENCE
- ENVIRONMENTAL AWARENES
- CONSUMER BEHAVIOUR
- COLLECTIVE SOCIO- MATERIAL SYSTEM OF PROVISION
- SOCIAL STRUCTURE

A PROPOSAL MODEL: SOCIAL PRACTICES OF DOMESTIC CONSUMPTION OF ELECTRICITY



BALARI, C., 2005

MODEL ADVANTAGES TO FORMULATE PUBLIC POLICIES

- **Social Practices Model** is considered the most appropriate model to study environment and to formulate policies due to:
- It is centred in concrete and **common aptitudes** instead of individual ones.
- It studies the possible joint initiatives for **specific groups** to reduced the negative effects for environment of their daily activities.
- The process of reducing the environmental impact in certain areas of social life is a result of **well informed and capable agents,** which take advantage of the possibilities in sight, in a context of a specific **provision system.**

WHICH ARE THE CHALLENGES OF THE ENERGY SOCIAL RESEARCH?

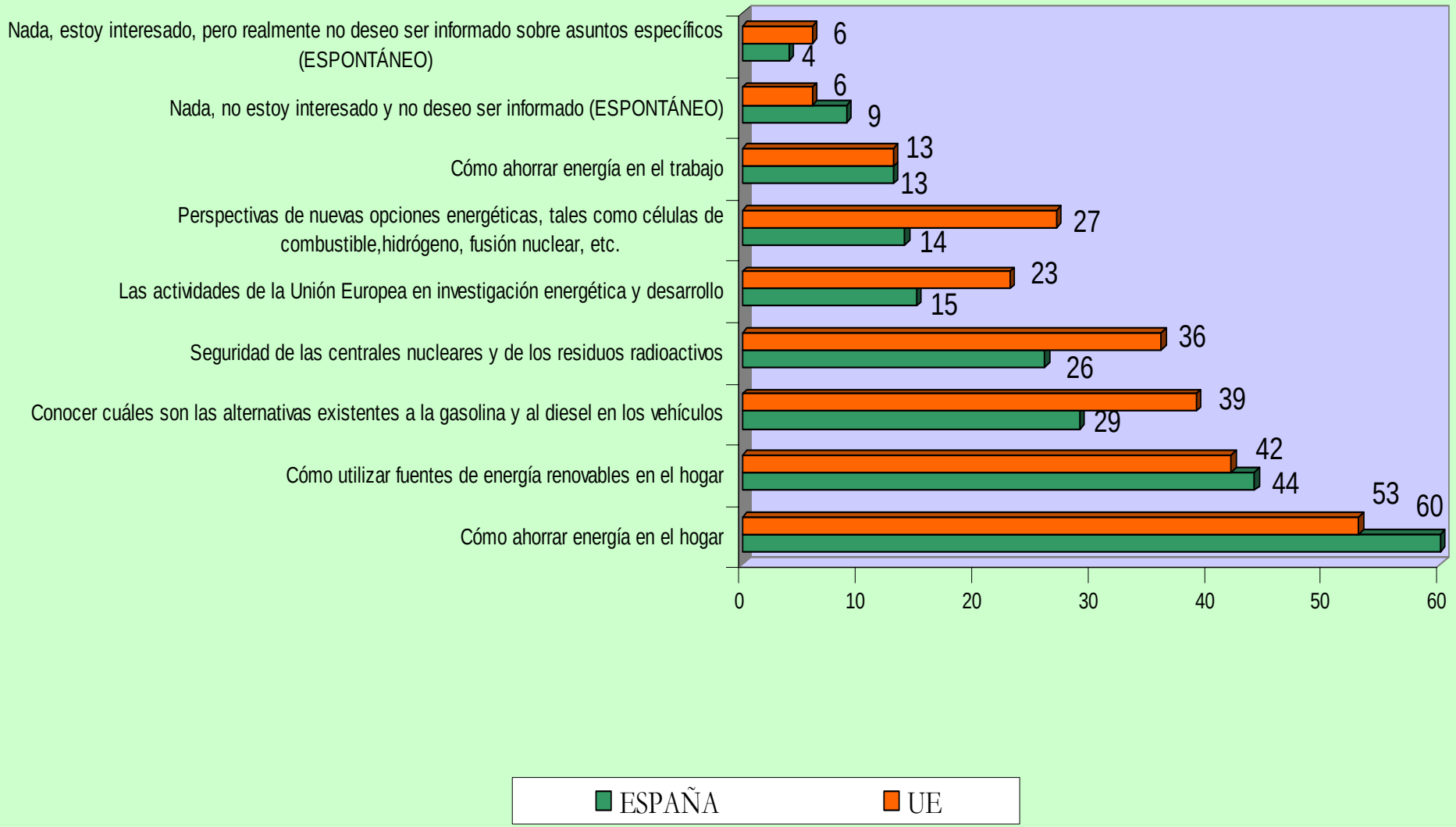
- To build new theoretical models for applied analysis
- To make visible the energy for the citizens-consumers
- To determine the social practices of energy consumption and energy saving
- To contribute to the formulation of public policies of energy saving and its evaluation

SOME FACTS FROM THE 2002 ENERGY EUROBAROMETER…

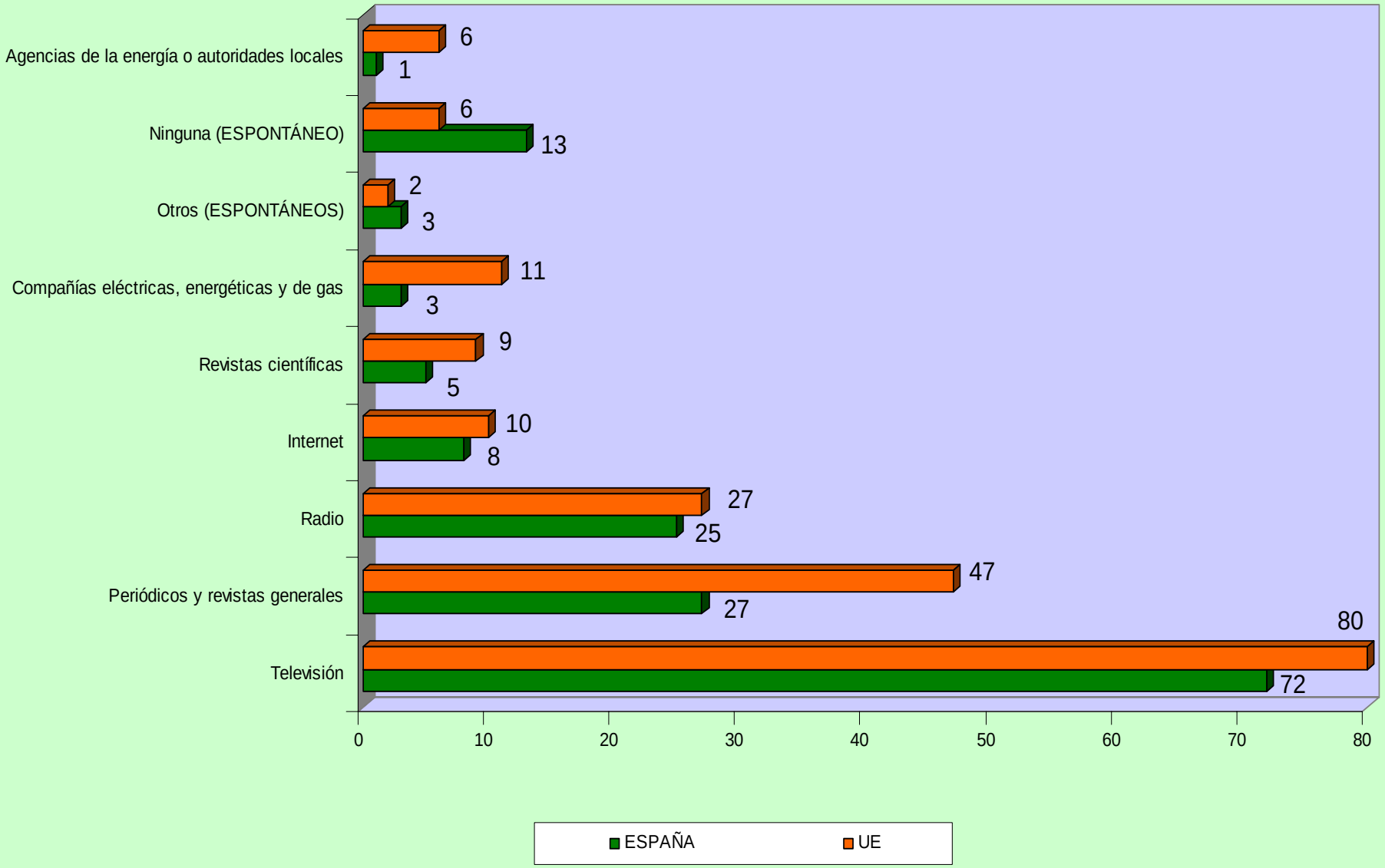
“ENERGY: ISSUES, OPTIONS AND TECHNOLOGIES. SCIENCE AND SOCIETY”

15 MEMBER STATES
February- April 2002.

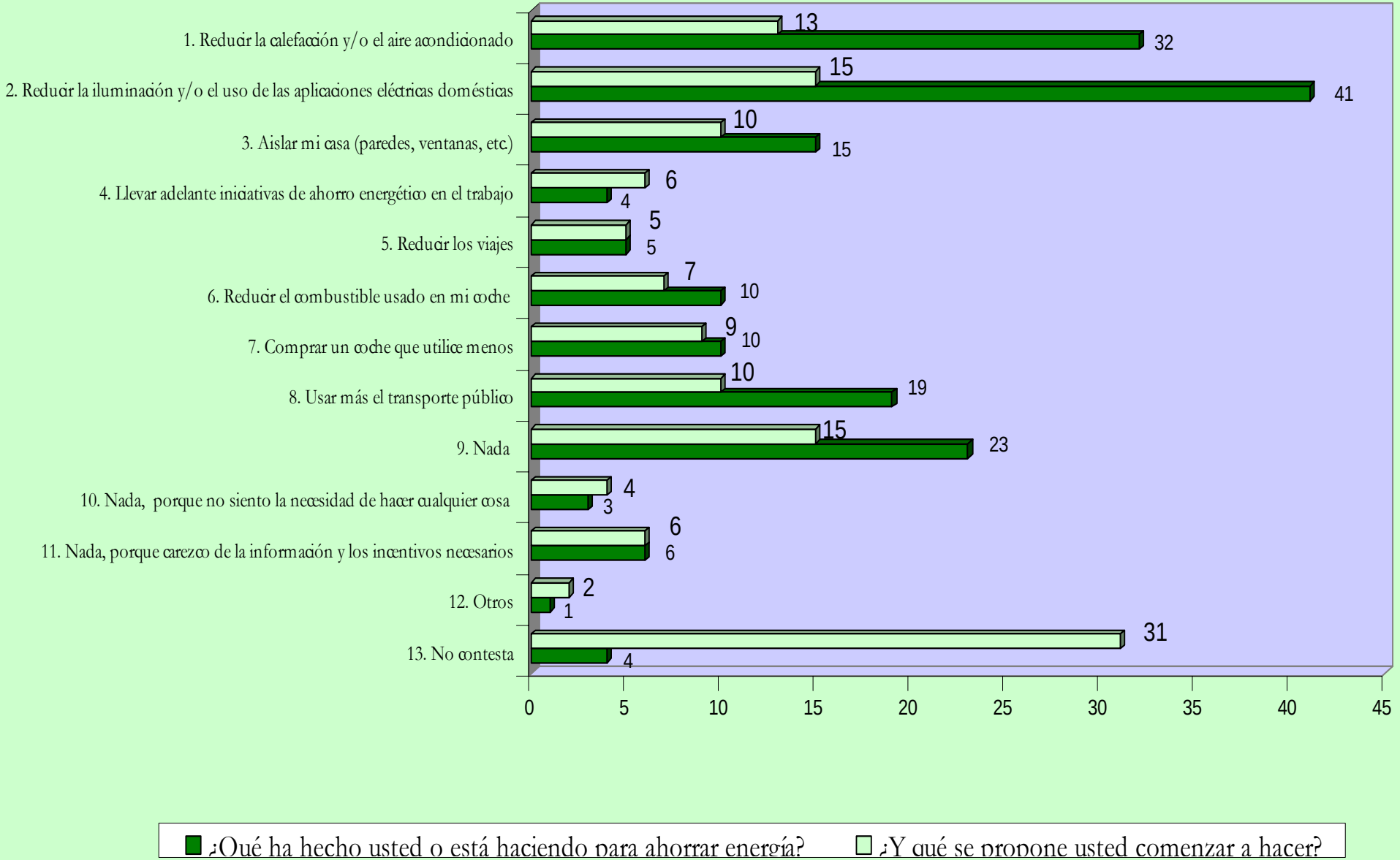
SPANISH & EUROPEAN OPINION ABOUT ENERGY ISSUES



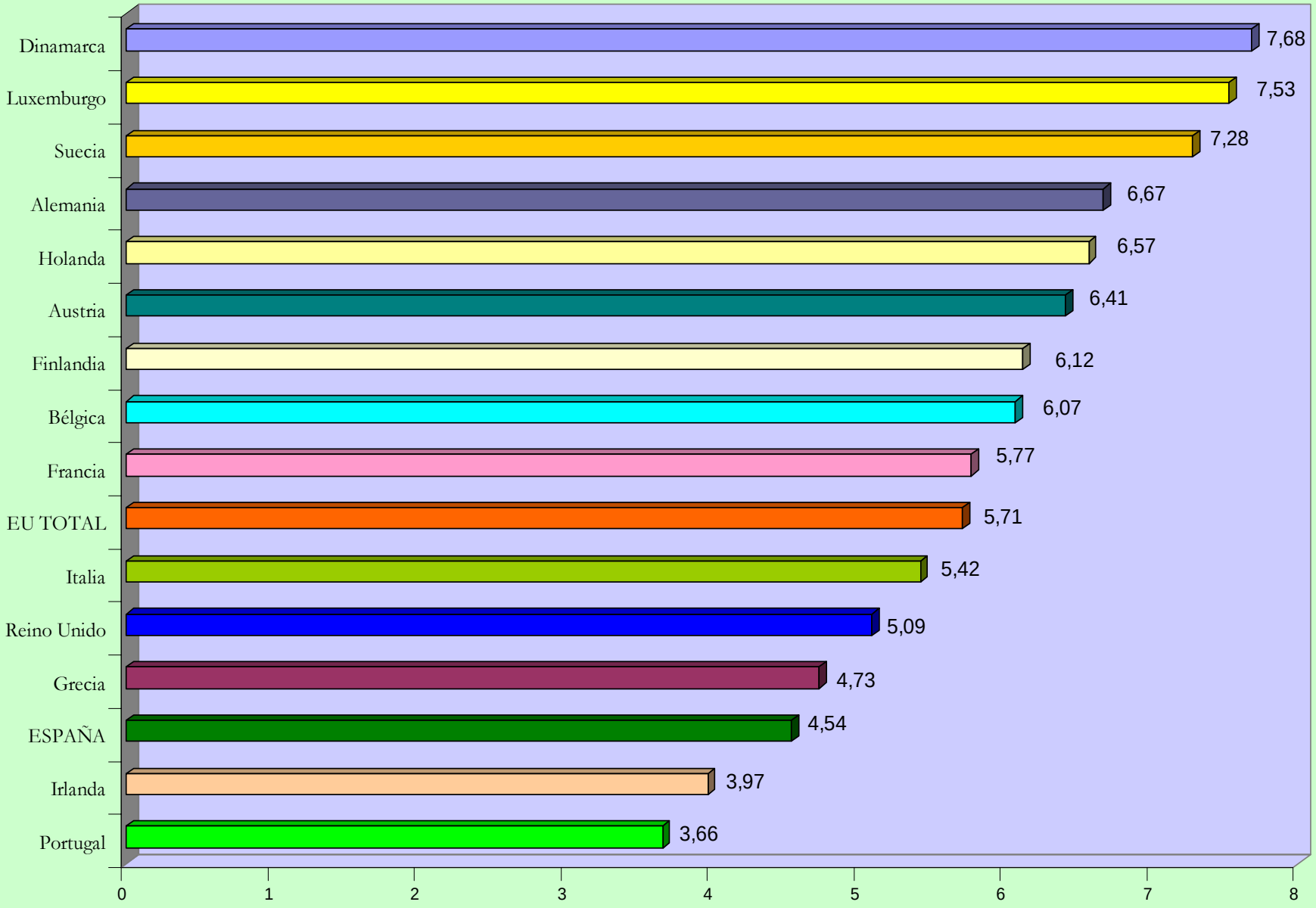
INFORMATION SOURCES ABOUT ENERGY



INDIVIDUAL ACTIONS TO SAVE ENERGY: PRESENT AND FUTURE



EUROPEAN ENERGY SAVING INDEX

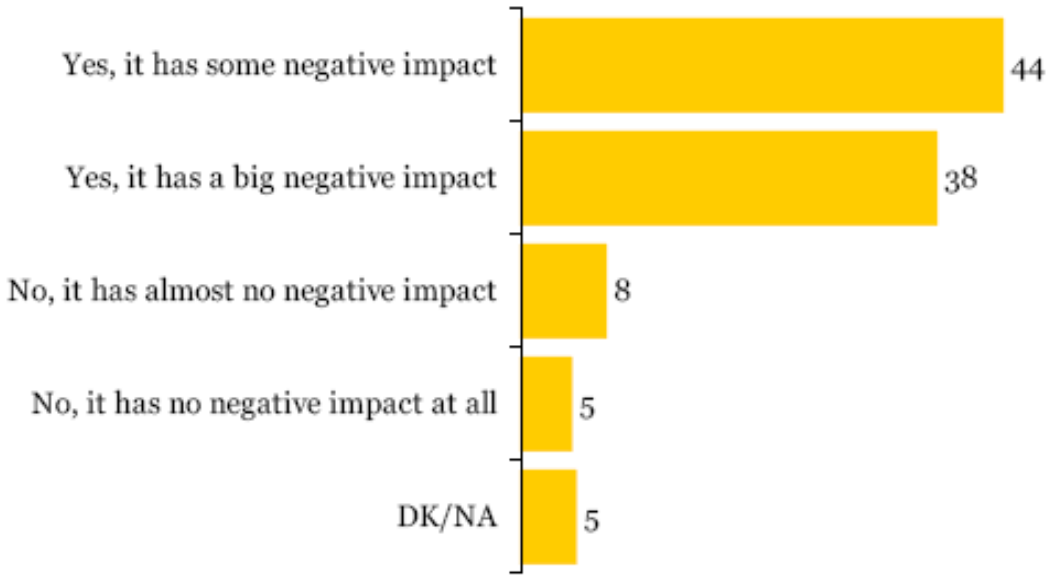


SOME FACTS FROM THE LAST ENERGY POLICY EUROBAROMETER…

ATTITUDES ON ISSUES RELATED TO EU ENERGY POLICY

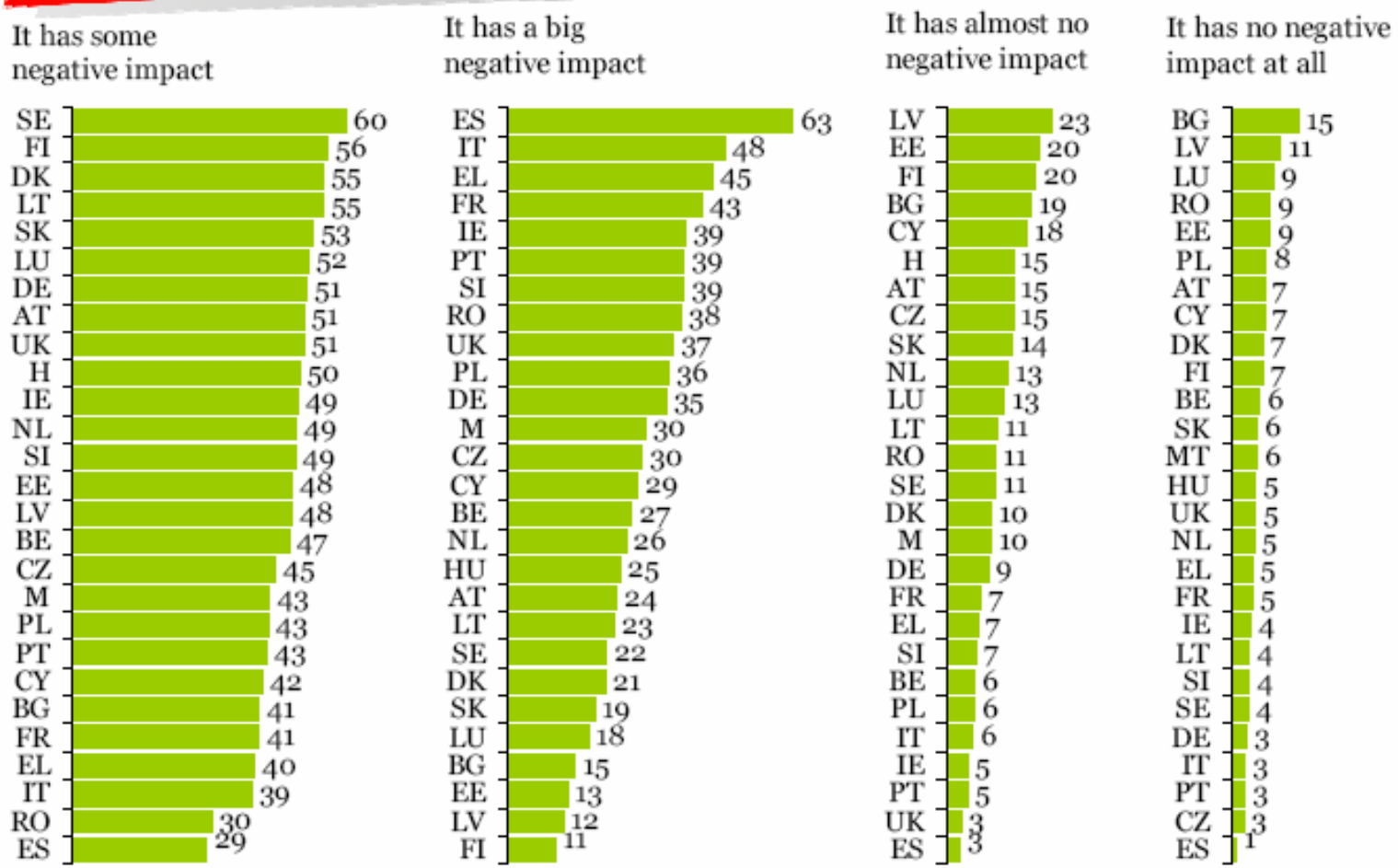
27 MEMBER STATES
February 2007.

Awareness of energy production and consumption has a negative impact on climate change and global warming



Q2. Do you think the way we in [COUNTRY] produce and consume energy has a negative impact on climate change and global warming?
%, Base: all respondents

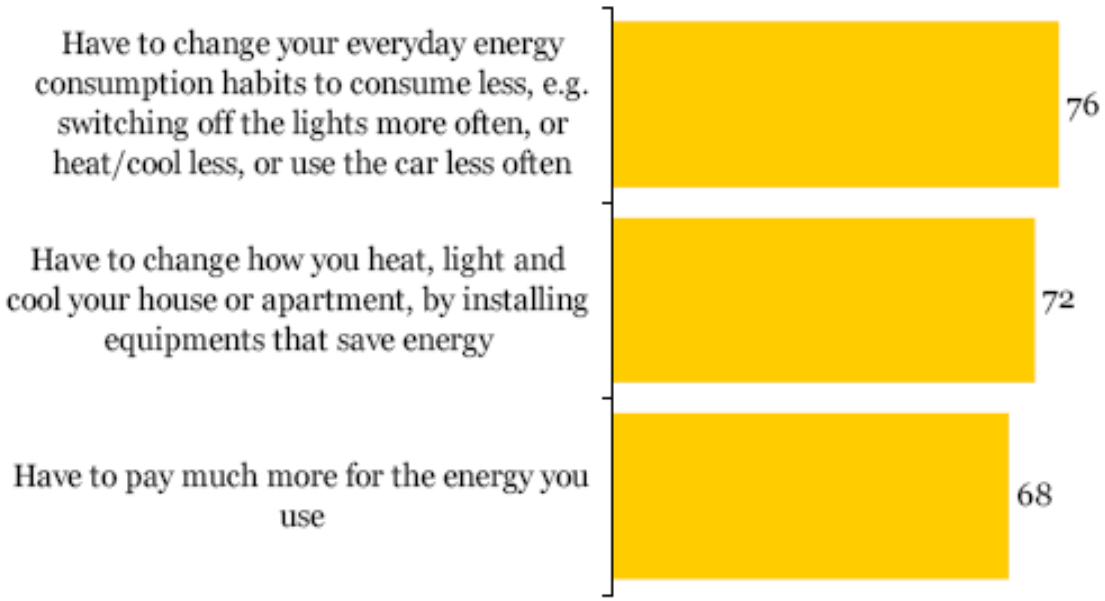
Awareness of energy production and consumption has a negative impact on climate change and global warming



Q2. Do you think the way we in [COUNTRY] produce and consume energy has a negative impact on climate change and global warming?
%, Base: all respondents, by county

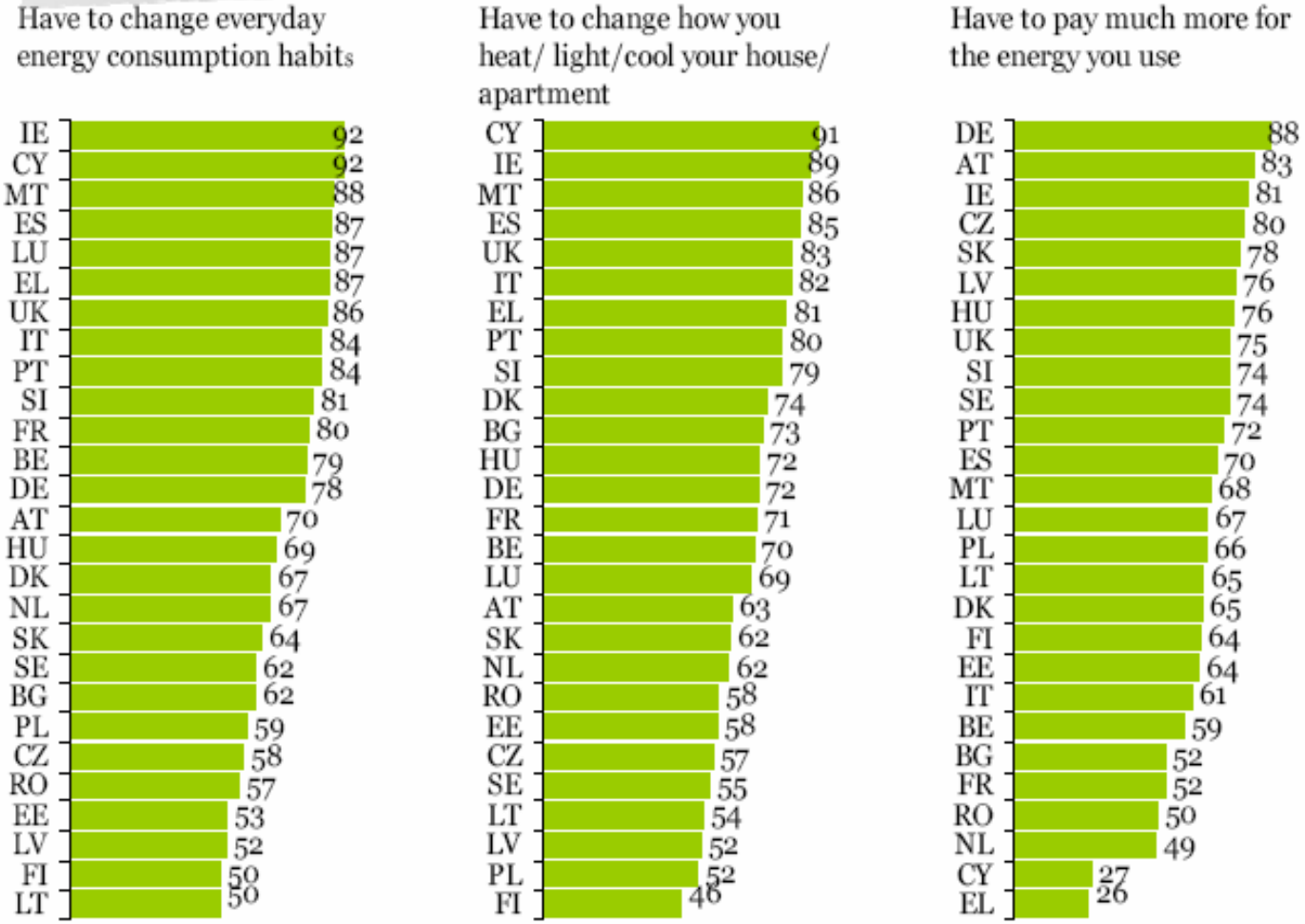
Flash Eurobarometer 206a – *The Gallup Organization, Hungary*

The effects of climate change on energy consumption in 10 years time



Q3. What effects do you think the ongoing climate change will have on the way you consume energy in 10 years time? Do you think you will ...
Base: all respondents
% of "Yes"

The effects of climate change on energy consumption in 10 years time



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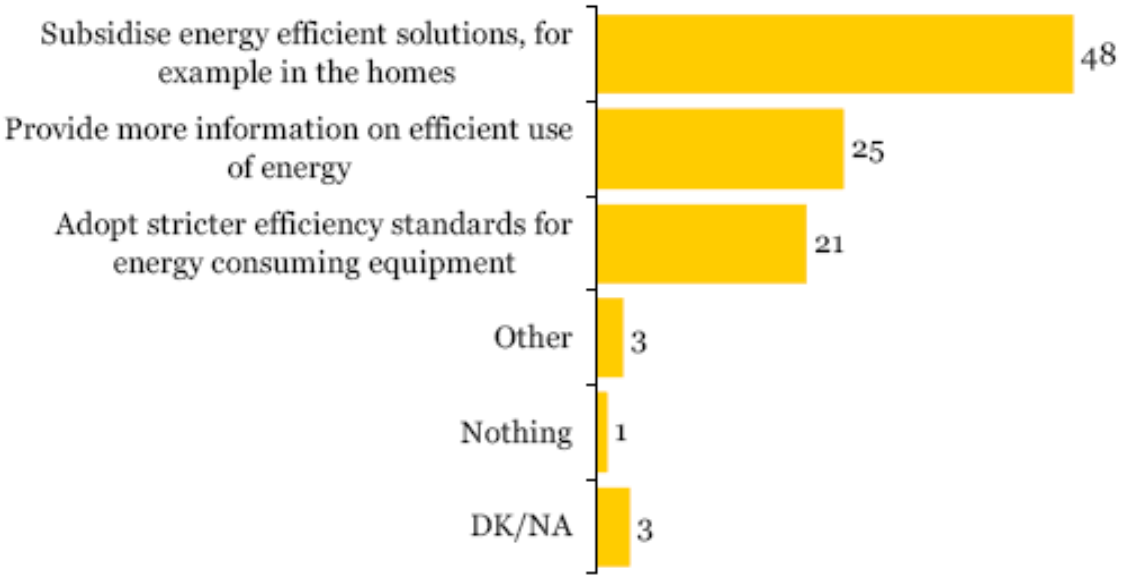
Base: all respondents

% of "Yes", by county

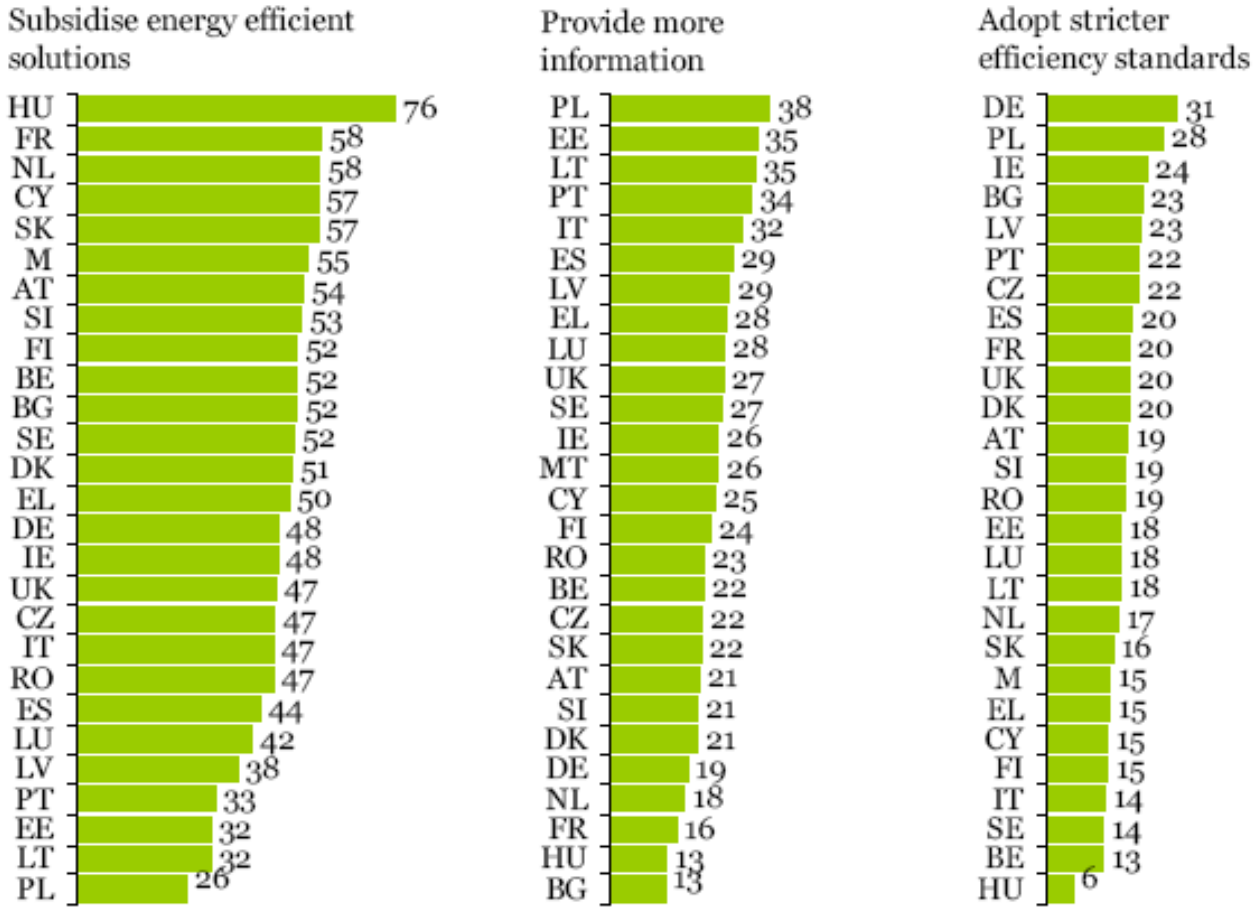
Flash Eurobarometer 206a – *The Gallup Organization, Hungary*

[NATIONALITY] government should do to help people to reduce their energy consumption



Q5. What do you think the [NATIONALITY] government should do to help people to reduce their energy consumption? Please select the most important one!
%, Base: all respondents

[NATIONALITY] government should do to help people to reduce their energy consumption

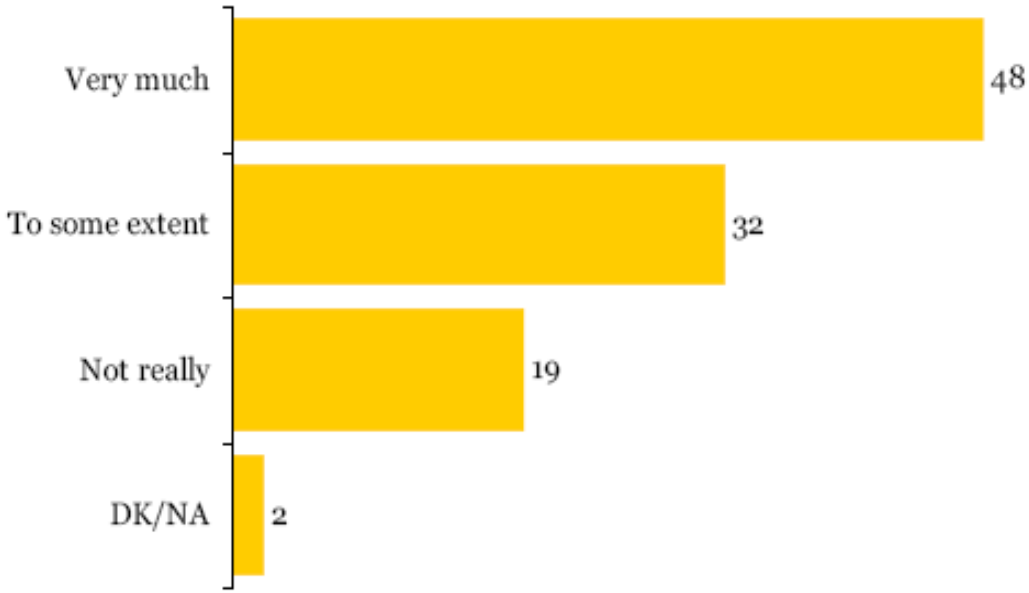


Q5. What do you think the [NATIONALITY] government should do to help people to reduce their energy consumption? Please select the most important one!

%, Base: all respondents, by country

Flash Eurobarometer 206a – *The Gallup Organization, Hungary*

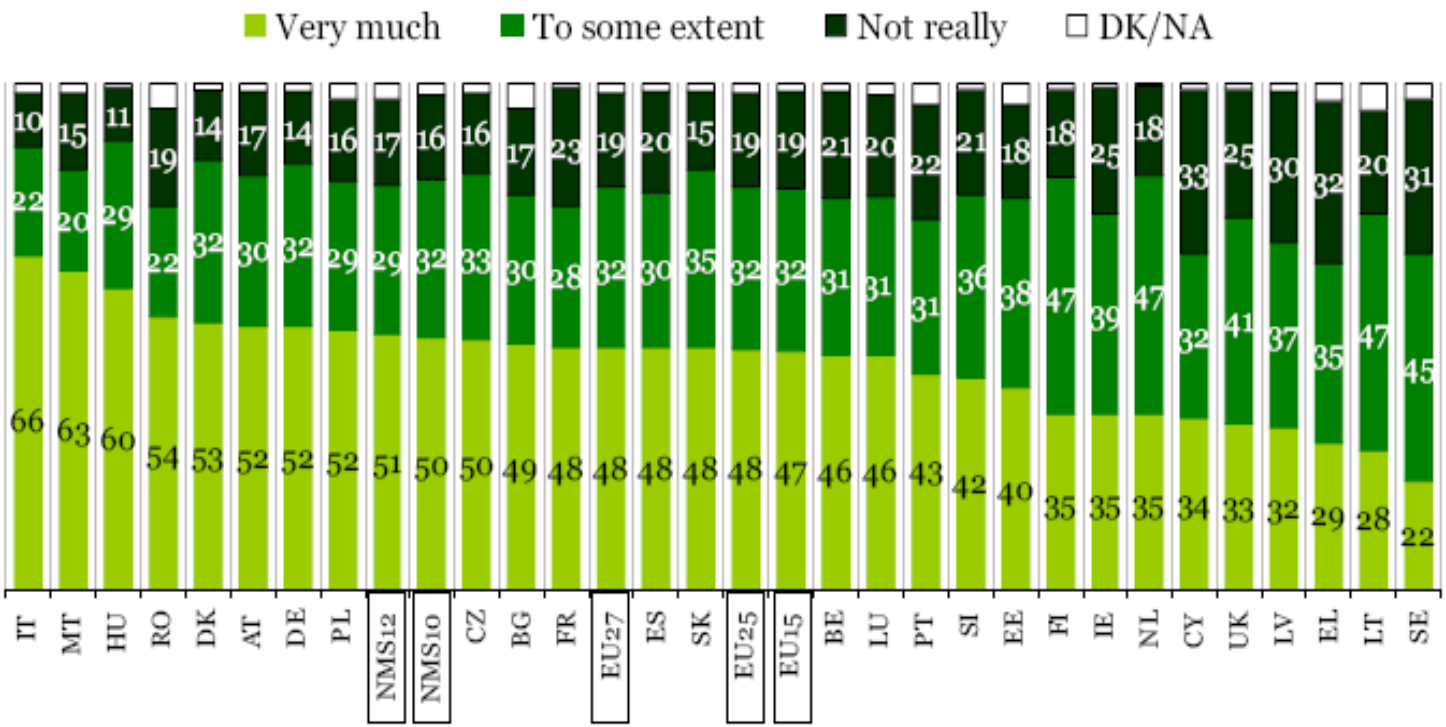
Influence of energy efficiency on buying household appliances



Q6. Does energy efficiency influence your decision when you buy household appliances?
%, Base: all respondents

Influence of energy efficiency on buying household appliances

Flash Eurobarometer 206a – *The Gallup Organization, Hungary*



Q6. Does energy efficiency influence your decision when you buy household appliances?

%, Base: all respondents, by county