

UN- CEPAL - GIZ Cooperación Alemana

Santiago 7 Septiembre 2015

“Cambio climático y fiscalidad ambiental en América Latina y el Caribe”

Cambio climático y política fiscal ambiental en la Unión Europea e Italia”

Aldo Ravazzi Douvan

Ministerio de Medio Ambiente de Italia, Asesor para EFR, GG, SD

Presidente Comité OCDE Evaluaciones del desempeño ambiental de Países

Ex-Presidente Comité OCDE Fiscalidad Ambiental

Ex-Presidente Comité OCDE sobre Integración de Políticas Económicas y Ambientales

Ex-Presidente Comité OCDE on Biodiversidad, Agua y Ecosistemas

Vice-Presidente Green Budget Europe (red expertos reforma fiscal ambiental)

Vice-Presidente Plan Bleu para desarrollo y ambiente en Mediterráneo (UNEP-MAP)

Ideas expresadas aquí no implican necesariamente las organizaciones con quien coopero

Aprendido a la OCDE (a)

INSTRUMENTOS PARA POLITICA AMBIENTAL (incluido Clima, Desarrollo Sostenible, Crecimiento Verde, ...)

OCDE clasificaciòn 1

- Instrumentos Command & Control
(Estàndares, Limites, Prohibiciones, ...)
- Instrumentos Voluntarios (Acuerdos, MoU, Covenants, Green Deals, Guías Directrices, ...)
- Instrumentos Economicos
(Instrumentos de mercado - MBIs)
- + Instrumentos de Evaluaciòn Ambiental
(EIA, SEA, IA, etc.)
- *Instrument Mixes (Mezcla de Instrumentos)*

Aprendido a la OCDE (b)
INSTRUMENTOS ECONOMICOS
PARA POLITICA AMBIENTAL

(incluido Clima, Desarrollo Sostenible, Crecimiento Verde, ...)

OCDE clasificación 2

1. Impuestos (ERT “Env. Related Taxes”; impact)
2. Cobros/Tarifas/Canones (e.g. agua - residuos - movilidad)
3. a) EFSs: Subvenciones Favorables al Ambiente (incentives, aid, exemptions, tax credits, tax exp., ...)
3. b) EHSs: Subvenciones Dañinas al Ambiente
4. Creación de Mercados (donde no existían, e.g. ETS, cuotas de pescado, cuotas de agua, water; seguros)
5. Sanciones (multas, penalidades economicas, ...)

What I've learnt at OECD (b)

ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL POLICY (incl. Climate Change, Green Growth, Sustainable Development, ...)

OECD classification 2

1. Taxes (ERT “Env. Related Taxes”; impact)
2. Charges/Fees/Tariffs (e.g. water - waste - mobility)
3. a) EFSs: Environmentally Friendly Subsidies
(incentives, aid, exemptions, tax credits, tax exp., ...)
3. b) EHSs: Environmentally Harmful Subsidies
4. Market Creation (e.g. ETS, fishery, water; insurance)
5. Sanctions (fines, penalties, ...)

Objetivos de la fiscalidad ambiental para CCP

1. Mejorar las condiciones/performance ambientales
2. Internalizar externalidades
3. Corregir “market failures” (fracaso del mercado)
4. Fomentar cambios en el comportamiento de consumidores y productores (orientar las decisiones de inversión), promover eco-innovación
5. Remunerar un servicio ambiental (de un ecosistema)
6. Dar un valor al ambiente, hacerlo “conveniente”
7. Crear un mercado donde no existía
8. Minimizar prohibiciones
9. Dejar el mercado hacer el mejor escoge/opción
10. Promover low-CO economy (0-CO?), GG, GE, SD
11. ...

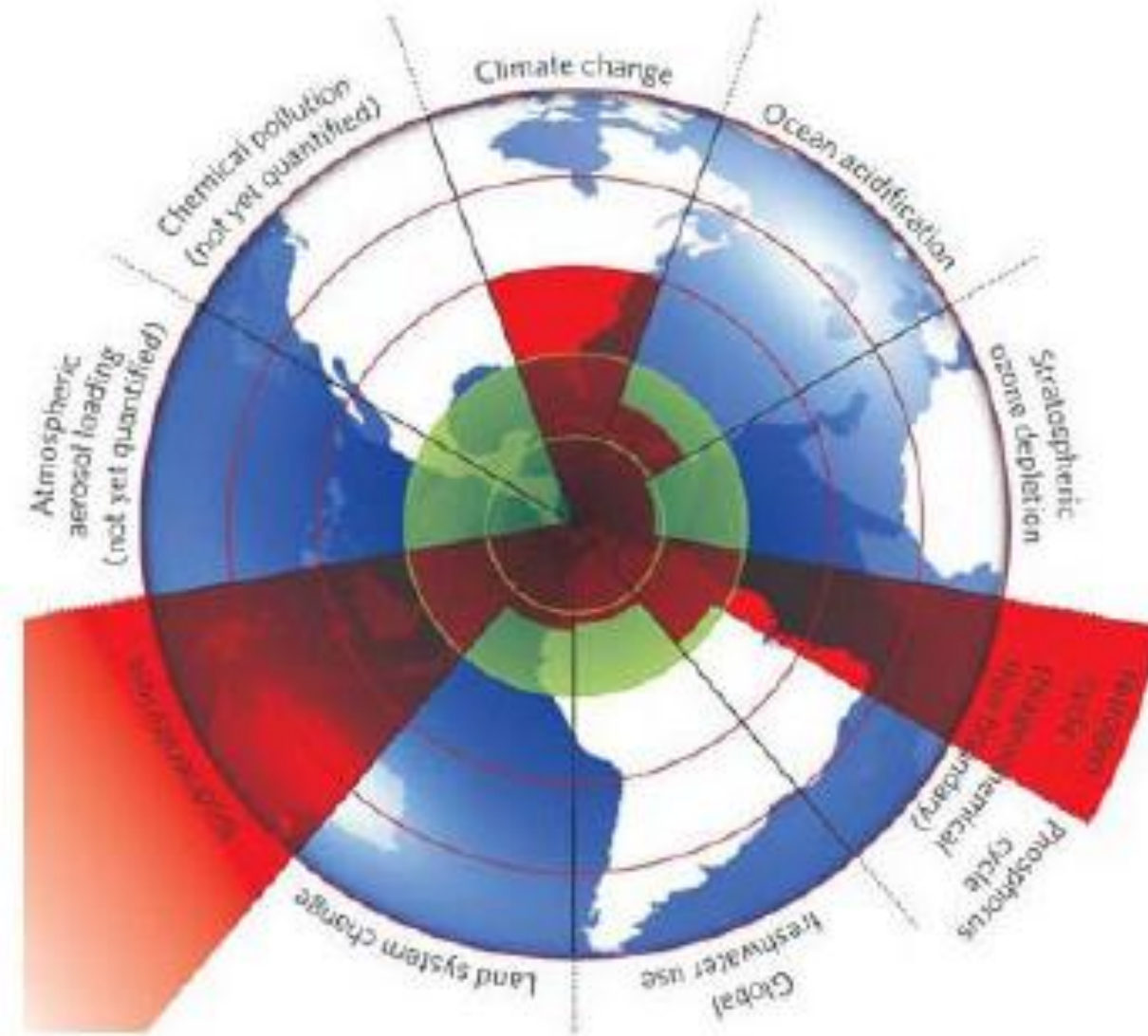
Objectives of environmental taxation for CCP

1. Improve environmental conditions/performance
2. Internalize externalities
3. Correct market failures
4. Influence consumers and producers behaviour
(orientate investment decisions)
5. Remunerate an environmental service
6. Give a value to the environment
7. Create a market where it does not exist
8. Minimize prohibitions
9. Let the market make the right choice
10. Promote GG, GE, SD, eco-innovation, low-CO eco.
11. ...



10 Planet Ecosystems to be kept under control:

1. Climate change
2. Biodiversity loss
3. Nitrogen cycle
4. Phosphorus cycle
5. Stratospheric ozone depletion
6. Ocean acidification
7. Global freshwater use
8. Land system change
9. Atmospheric aerosol loading
10. Chemical pollution



Source: Rockstrom et al (2009)

Con este marco conceptual compartido,
podemos intentar comprender
que pasa a Europa

Políticas europeas contra cambio climatico

Estrategia Europa 2020

Marco Energia y Clima 2030

Roadmap for moving to a competitive low CO economy in 2050

Estrategia y Roadmap Eficiencia Recursos (Resource Efficiency)

7º EAP (Programa de Acción Ambiental) 2010-20

...

Directiva ETS (Emissions Trading Scheme)

Directiva Eficiencia Energetica

Directiva Eurovignette (transporte camiones)

Reglamento IEEA (Integrated Environmental & Economic Accounts) con modulos Impuestos Ambientales, Emisiones GEI y Energia

...

Suspendidos (relanzados?):

Revision ETD (Energy Tax Directive)

Paquete Economia Circular (conectado a Eficiencia Recursos, 3Rs, revision directivas residuos, ...)

**Cuanto hay de fiscalidad en las políticas
contra el cambio climático en Europa?**

Los 5 Objetivos de la UE para 2020

Los cinco objetivos para la UE en 2020

1. Empleo

- empleo para el 75% de las personas de 20 a 64 años

2. I+D

- inversión del 3% del PIB de la UE en I+D

3. Cambio climático y sostenibilidad energética

- emisiones de gases de efecto invernadero un 20% (o un 30% si se dan las condiciones) menores a los niveles de 1990
 - 20% de energías renovables
- aumento del 20 % de la eficiencia energética

4. Educación

- tasas de abandono escolar prematuro por debajo del 10%
- al menos un 40% de las personas de 30 a 34 años de edad deberán completar estudios de nivel terciario

5. Luchar contra la pobreza y la exclusión social

- reducir al menos en 20 millones el número de personas en situación o riesgo de pobreza y exclusión social

El Marco Energia y Clima para 2030 para ayudar a la UE a abordar cuestiones como:

- dar el siguiente paso hacia el objetivo de **reducir**, de aquí a 2050, las **emisiones de gases de efecto invernadero** en un 80-95% en relación con el nivel de 1990
- **los precios elevados de la energía** y la vulnerabilidad económica de la UE a futuros incrementos de precios, especialmente del gas y el petróleo
- la **dependencia de la UE con respecto a las importaciones de energía**, con frecuencia procedentes de zonas políticamente inestables
- la necesidad de sustituir y mejorar las **infraestructuras energéticas** y de proporcionar un marco regulador estable para los posibles inversores
- la necesidad de que la UE alcance un nuevo acuerdo internacional sobre cambio climático incluido un objetivo de reducción de las emisiones de GEI para 2030.

El Marco Energia y Clima

Objetivos (2014)

- 1.un objetivo vinculante para la UE en 2030 de al menos **un 40% menos de emisiones de gases de efecto invernadero** en comparación con 1990
- 2.un objetivo vinculante para la UE en 2030 de al menos un **27% de energías renovables** en el consumo de energía
- 3.un objetivo *indicativo* para la UE en 2030 de al menos un **27% de mejora de la eficiencia energética**
4. la consecución urgente, a más tardar en 2020, del actual objetivo de **interconexiones de electricidad del 10%**, en particular para los Estados Bálticos y la península ibérica, y del objetivo de alcanzar el 15% de aquí a 2030.

Políticas europeas contra cambio climático

ETS (Emission Trading Scheme)
un acontecimiento mayor

mercado de emisiones para gases de efecto invernadero (+-50% del total), 28 Países UE + Ic-Li-No, 11.000 heavy energy-using installations in power generation and manufacturing industry

problemas:

- conexión entre mercados nacionales y con mercados internac. (e.g. Japon -, Australia -, China +, Corea Sur +) y con los mecanismos de cooperación internacional (JI-CDM)
- mucha autonomía nacional, distribución paternalística y gratuita
 - precio bajo: acontecimiento o fracaso

3º revisión del funcionamiento del mercado 2013-20

- objetivo común de EU (no diferenciado por país como antes)
 - principio de asta competitiva
 - -21% 2020/2005; -43% 2030/2005 (propuesta C.E.)

Políticas nacionales de Países Europeos contra cambio climático

Carbon Tax en muchos Países de forma, aplicación nivel diferentes (SW-FI-DK-UK-EI-DE-FR-SI-etc.)

- Suecia probablemente el mejor ejemplo

Nivel alto , adaptación a través de los años

Problema de exenciones y reducciones para miedo de la competitividad y de la competición internacional

- Francia, Grenelle de l'Environnement

La Comisión Rocard, la implicación de stakeholders y ciencia

El anuncio, el problema social

El problema jurídico (demasiadas exenciones)

- Gran Bretaña ETS con precio mínimo y Impuesto Carbonio

- Italia, Carbon Tax 1999 suspendida por miedo de inflación; pero impuesto sobre carburanti (combustibles-fuels) tradicionalmente alto

Con estos objetivos el espacio para instrumentos económicos y fiscalidad ambiental parece significativo.

Tenemos todavía problemas de equilibrio entre

- decisiones fiscales (unanimidad)
- decisiones ambientales (mayoría calificada)

Tenemos el problema del federalismo:
más o menos Europa?

Federalismo, cooperación o nacionalismo?
Enfoque subsidiariedad o clima bien común?
Optimal multi-level governance?

Respuesta/decisión política

Carbon Tax vs ETS

Impuesto Carbonio vs Mercado de Emisiones GEI

Teoria economica equivalente

El caso Europeo

Politica fiscal vs politica ambiental

**Propuesta de un Impuesto Energia-Carbonio ya
lista en 1992, antes Conferencia Río 1992**

Delors – Delbeke – Convery – Majocchi – et al.

**Blocada por regla unanimidad fiscal,
entonces estudio y hypothesis de ETS
(que es una politica ambiental,
no pasa por presupuestos nacionales)**

**Comisión Monti sobre Recursos/Impuestos UE
(el presupuesto UE es 1% del PIB UE)**

Source IEEP (2010, 2015)

Degree of coordination and harmonisation

Legal approaches across the European Union

Legal approaches for a **subset of EU Member States:**
Enhanced cooperation

Political intention to promote MBIs: **Open Method of Coordination (OMC)**

Multi-country cooperation and coordination

National, regional, local approaches & Learning from others
(copy-catting)

Legislative specific minimum requirement: e.g. Energy Tax Directive; value added tax (VAT)

Legislative general requirement: e.g. 'principle of recovery of the costs of water services' under Water Framework Directive

Legislative possibility: e.g. strengthen Eurovignette Directive

Special legal framework: e.g. initial Schengen (limited number of countries under international treaty distinct from EU treaties).

Existing legal framework: e.g. enhanced cooperation under EU Treaties – little used to date (patents, financial transaction tax)

Formal/structured OMC: e.g. Country Specific Recommendations (CSRs) under European Semester

Flexible/light OMC: e.g. Green public procurement (GPP)

Voluntary policy coordination: e.g. CO2 from cars; reform of environmentally harmful subsidies

'Coalition of like-minded countries' to be defined depending on interests: e.g. climate and energy, resource efficiency and circular economy, pollution and health etc.

Inspired by and/or based on **other countries' & states' initiatives**

Own initiatives developed according to own needs

**1.Economists' Call for an Ambitious Climate Agreement en
Paris**

**2.LCS-Rnet Economists Call
Low-Carbon Societies Research Network**

**3. CPLC
Carbon Pricing Leadership Coalition**

4.Comité OCDE Impuestos Ambientales (JMTEE)

5.Red: Green Budget Europe

**6.GCET 2015 Sidney
Global Conference on Environmental Taxation**

**7.Conferencias Cientificas
EAERE-AERE-IAERE-FAERE**

8.World Resources Forum – UNEP IRP

1.Economists' Call for an Ambitious Climate Agreement en Paris

asking also for a global price for carbon
through CO2 tax or ETS or both

DePerthuis - Tirole (Nobel Prize 2014) - Aghion,
Arrow, Bretschger, Convery, Elgie, Ekins, Heal,
Glachant, Parry, Sterner,

2.LCS-Rnet Economists Call

Low-Carbon Societies Research Network

Call: A moment of truth for climate and sustainable
development

màs orientado sobre finanza y tecnologia
(no contardictorio con el primero)

3. CPLC

Carbon Price Leadership Coalition

firmado el año pasado por Primer Ministros y CEOs
al Ban-Ki-Moon Summit de Septiembre 2014
preguntando y proponiendo un precio al carbono
Stoltenberg (UN Special Envoy on Climate)
McKyte (WB VP Special Envoy on Climate)

4. Comité OCDE Impuestos Ambientales (JMTEE) (ya incluye Mex-Chi, Col-CRica observadores, estructura gubernamental , pero abierta a los G.)

Ministerios Hacienda y Medioambiente

5. GBE - Green Budget Europe (and beyond)

Red de expertos para la reforma fiscal ambiental,
la eliminacion de los subsidios ambientalmente daninos, y
dar un precio al carbonio

- Apoyo a la Comisiòn Europea
y la Presidencia de turno del País
- Estudios (e.g. “CEPRIE - Carbon and Energy Pricing
Reform in Europe“, Company car taxation con Vivid
Economics)
- Conferencia Anual sobre el tema màs caliente del ano

Encrucijada de expertise:

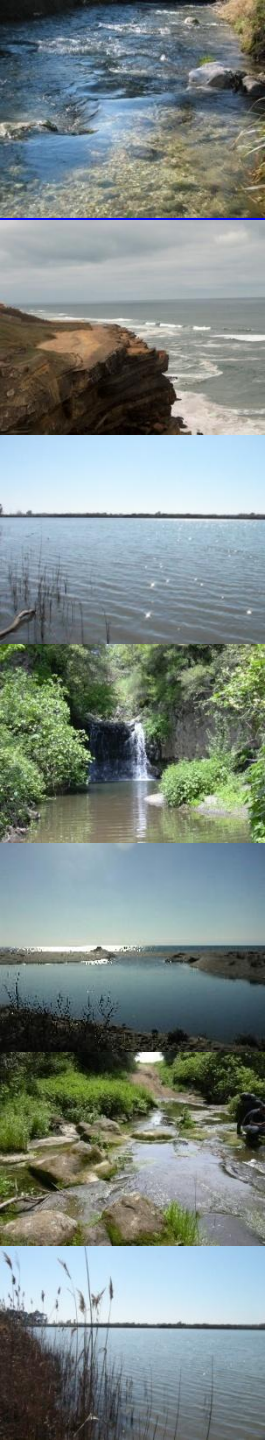
- Expertos de Gobiernos y OIGs
 - Expertos de ONGs
- Expertos de Investigación-Universidad
 - Expertos de empresas

GBG-FOES Green Budget Germany
GIZ – Fundacion Europea Clima – F. Mava

6.GCET 2015 Sidney
Global Conference on Environmental Taxation

7.Conferencias Cientificas
EAERE-AERE-IAERE-FAERE
asocianes màs tradicionales

8.World Resources Forum
UNEP International Resource Panel
Davos 11-15 Octubre 2015



GLOBAL PERSPECTIVES TODAY

- **ECONOMIC-FINANCIAL CRISIS**

adds to the already existing environmental crises:

- **CLIMATE CHANGE CRISIS**

- **BIODIVERSITY LOSS CRISIS**

- **WATER CRISIS**

- **RESOURCES AND FOSSIL FUELS EXHAUSTION
PERSPECTIVES**

- **Von Weizsaecker Hypothesis on a Progressive Tax on
Energy (Factor 4 & Factor 5, Unep Resources Panel)**

Taxes on labour constitute the main source of revenue in most countries, despite considerable variation (EU sample)

Poland, Spain and UK are low-taxing, France, Germany and Hungary high-taxing states

Figure 1. The composition of tax revenue varies strongly across the sample, with labour taxes ranging from 38 to 57% of total tax revenue

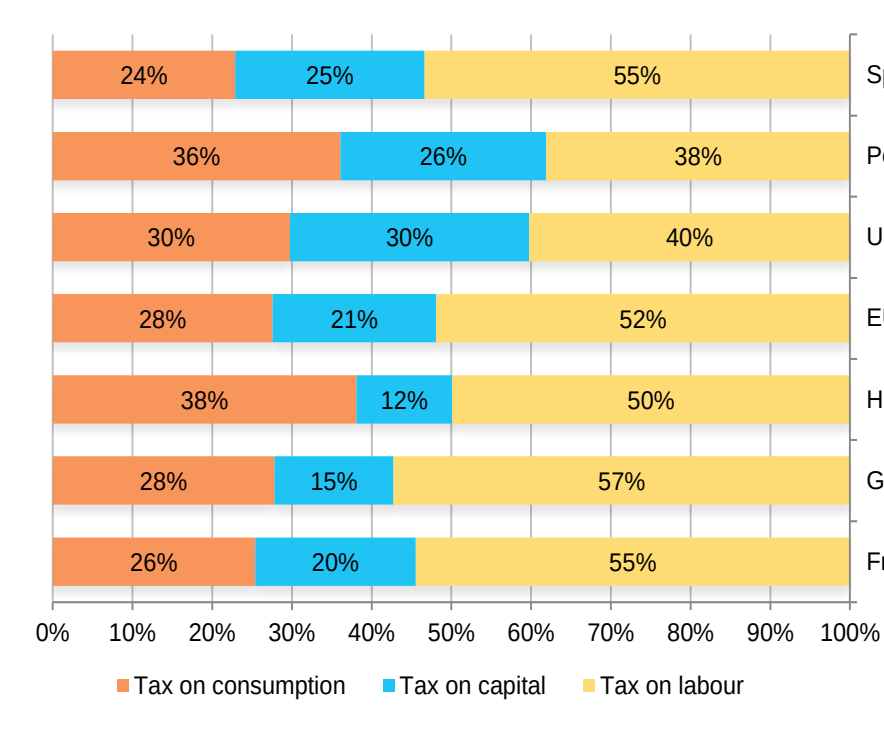
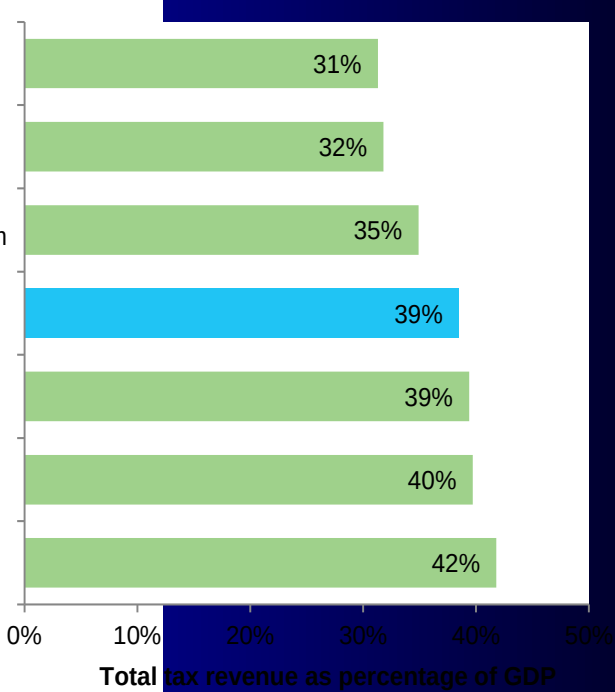
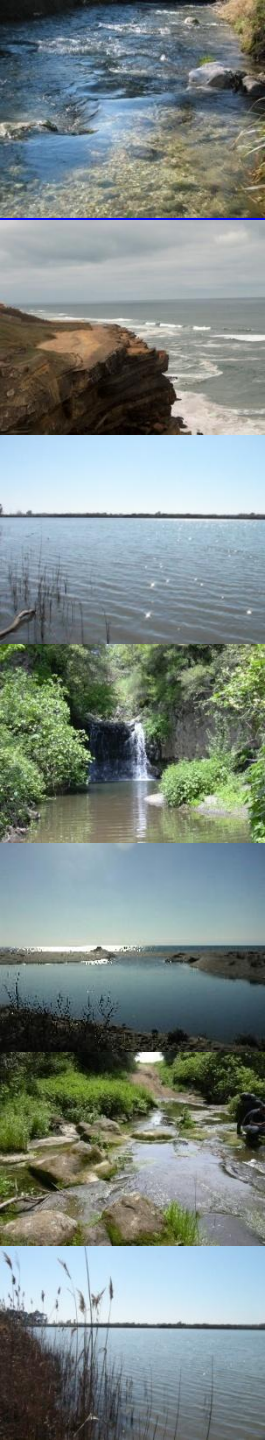


Figure 2. The total tax revenue as a share of GDP varies from 31% in Spain to 42% in France





ENVIRONMENTAL TAXES REVENUE

OECD average:

- 6,5 % of revenue (Country variability 3-14%)
- 2 % of GDP (Country variability 1-5%)
- Energy and transport = 90 % of revenue

➤ Wide margins of manoeuvre:

➤ NL (EU-OECD) 10%

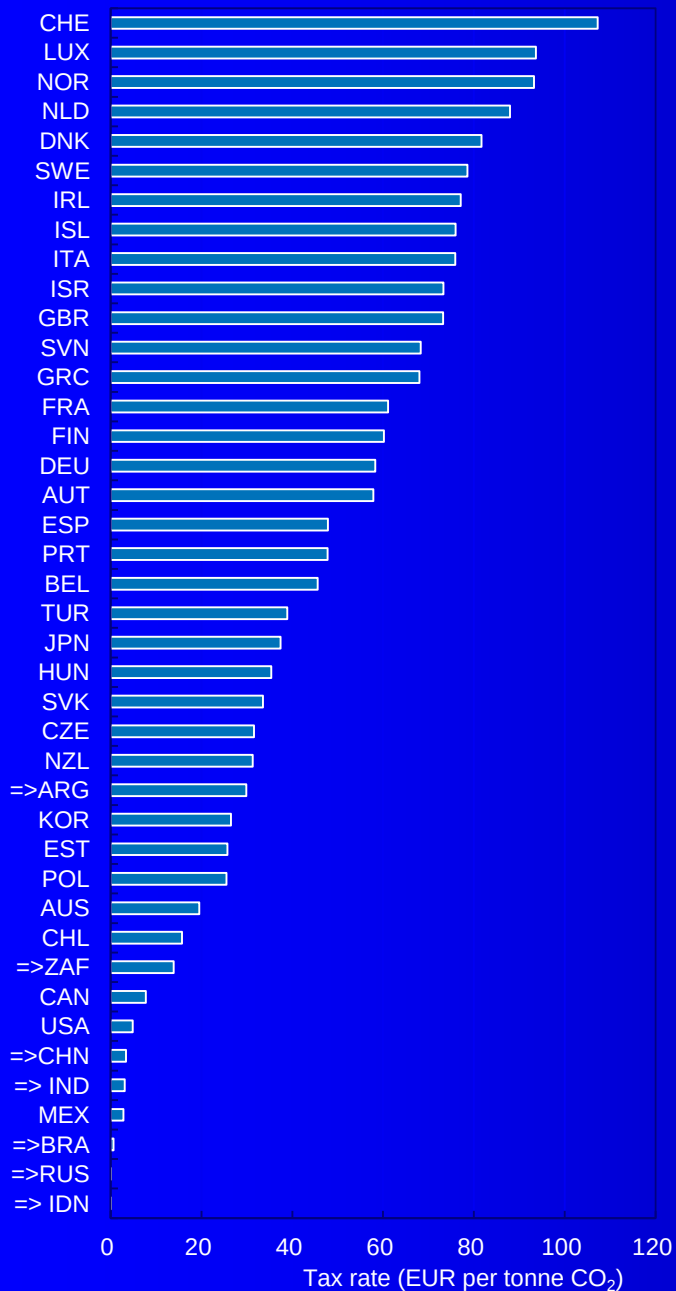
➤ DK (EU-OECD) 12%

➤ TK (non-EU, OECD) 14%

➤ COSTA RICA (non-EU, non-OECD) 18%

The objective should not be the average but follow leaders

➤ Studies about a 30% option by 2030



In my Country many Firms Associations and Consumers Ngos complain about the high taxation of energy.

For a Country with low natural resources this might not be necessarily a surprise (Gbr).

If you make an historical comparison deflating figures, taxation has even decreased in the last 30 years.

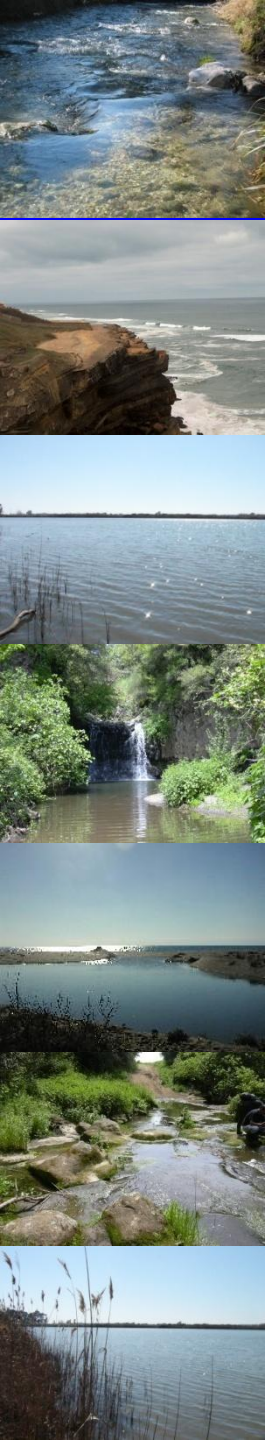
Moreover if you decide that Climate Change is real...

Probably if high energy taxation was accompanied by a low taxation of company and personal income, the view would be different.

Much less complaints about renewable and energy efficiency subsidies.

Many would prefer this charged on general fiscality than on electricity bills (and PPP?).

Source: OECD Taxing Energy Use (2015)



Economic/Policy Instruments for EPs

OECD database (only OECD countries data):

375 environmentally-related taxes [2006]:

- ENERGY : 150
- TRANSPORT (motor vehicles): 125
- WASTE: 50
- OTHERS (e.g. water, products): 50

Priority to central level revenue.

1.500 economic instruments [2010] [2014] ?

- Taxes: 600
- Tariffs: 300
- Tradable permits: 70 120
- Deposit schemes: 50 90
- Env. (friendly) subsidies: 370 710
- Voluntary instruments: 110 320
- Env. (harmful) subsidies: (---) (550)

www.oecd.org/env/policies/database

With these elements in mind,
we can try some answers
to our session questions

a) Taxes are one instrument to attain environmental objectives, permit trading systems and traditional regulations are others.

- Within economic instruments charges & fees should not be neglected;

- Still within economic instruments, well designed subsidies to promote eco-innovation or guarantee the transition towards a GG-SD-LowCoEco may be justified for public intervention

- Permit trading systems (e.g. ETS) not necessarily alternative to an environmental tax (e.g. CO tax), could use both simultaneously

- The point is to give a value to the environment, often underestimated or forgotten: change the economic conveniences, the relative prices, so to reorient the economy.

b) When should taxes be used in place of other instruments?
In all cases where leaving to consumers and firms the freedom to find the best solutions

c) What are the pros and cons of taxes versus other approaches?

d) What complementary policies (e.g. product and market regulation, innovation policy, infrastructure investment) are needed to help tax policies work more effectively and address market failures that taxes cannot adequately address?

- Voluntary Instruments in many cases and many countries may play a role: the identification and promotion of best practices is key; but it is not sufficient: need to guarantee results, 5-10% vs. 95-90%

- Regulatory Instruments can be necessary when the scientific community is clear about limits and thresholds, especially for humans' and ecosystems' health; and Regulatory Instruments may have an economic impact, imposing costs or creating indirectly markets;

- I would not enter the debate of which instruments are specifically better in principle; there is a full menu of options that each country can use individually or collectively; the point is to identify the environmental problem and find the most efficient solution: very often it will be the economic instrument;

e) What is the scope and what are the limitations of taxation?

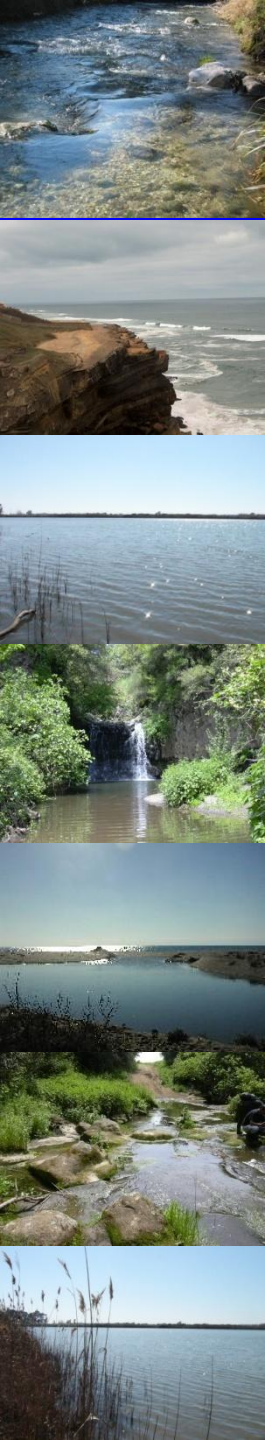
-almost unlimited? distribution-competition-recycling (Gurrià);
the only true limit is probably that of social justice in terms of distribution
of revenue and wealth

-But even when Voluntary or Regulation Instruments are in place,
Economic Instruments can be introduced to strengthen the effectiveness
and efficiency of those instruments (and of the economy)

-It's more a matter of revising the fiscal system and make it
environmentally friendly / sustainable; without the environment
(ecosystems, services, natural resources) the economic systems collapse

-This is why the hypothesis of a green fiscal reform - intended as a
systematic revision of the fiscal system, with
-the restructuring of existing tax rates and structures in an
environmentally friendly way,
-the removal of environmentally harmful subsidies,
-an effective and impacting pricing of carbon and
-the shift of the fiscal burden from labour and companies to pollution and
natural resources - ,
seems appealing

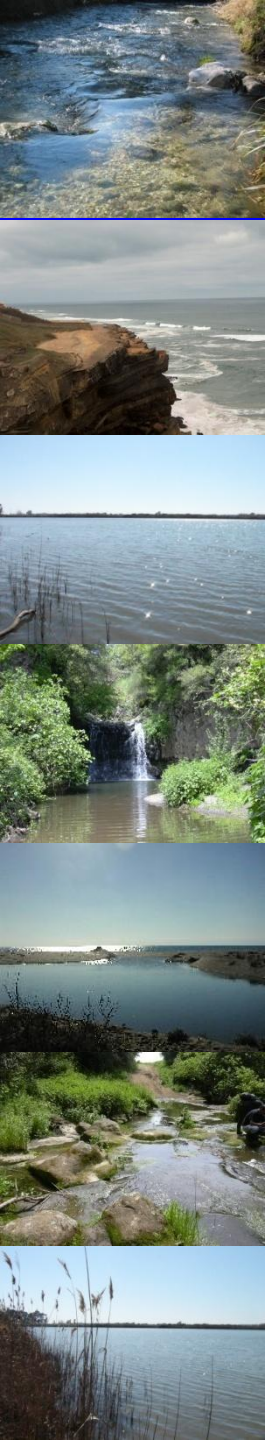
**Reserve slides
for possible questions and discussion
(to be removed at the end of the session)**



ECONOMIC INSTRUMENTS FOR EPs and SD

Objectives of subsidies environmentally motivated (EFSs):

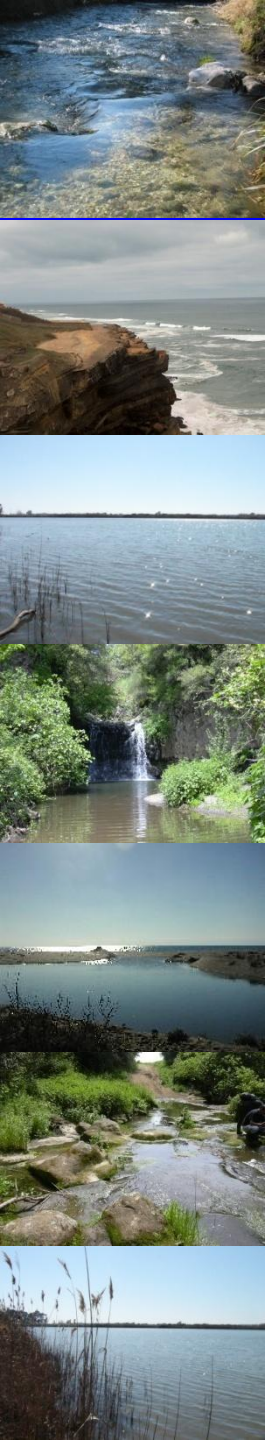
1. Encourage an environmentally friendly (low environmental impact) product
2. Encourage an environmentally friendly (low environmental impact) investment
3. Encourage an environmentally friendly (low environmental impact) sector/industry
4. Encourage eco-innovation
5. Encourage low-carbon technologies
6. Encourage EPs and SD eco-innovation
7. ...



Economic instruments for EPs and SD

Avoiding misunderstandings (à la Gerelli):

- Environmentally-related taxes (impact)
- Taxes (unrequited payments to the State) vs Tariffs (in exchange for a service)
- Taxes, duties, contributions, surcharge, ...
- The name is not a sufficient criteria
- The official motivation as “green” is not a sufficient criteria
- « Earmarking » is not essential for defining an tax as “environmental”



Economic instruments for env. policies and SD

Environment is priceless...

The economist point of view

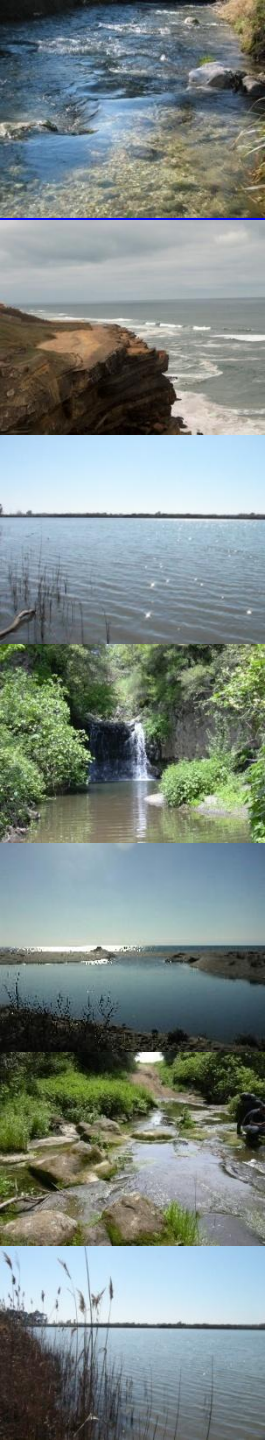
- Give a price, give a value to the environment
- Make the environment convenient
- Distribution - competitiveness - employment

The public finance point of view

- Create revenue for financing expenditure
- Maintain fiscal stability - financial sustainability
- Cost of collecting revenue

The scientific environmentalist point of view

- Climate change, biodiversity, water, waste, ...
- Change of paradigm - Limits of growth (Club of Rome)
- Environmental sustainability of development



Economic instruments for env. policies and SD

Environment is priceless ...

The company CEO point of view

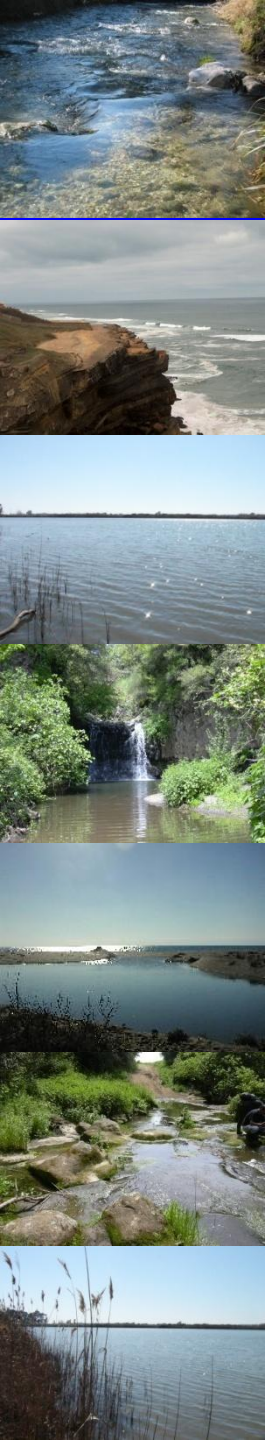
- Sector competitiveness
- International competitiveness
- Profitability

The trade union leader point of view

- Employment
- Purchasing capacity
- Industrial competitiveness

The political scientist point of view

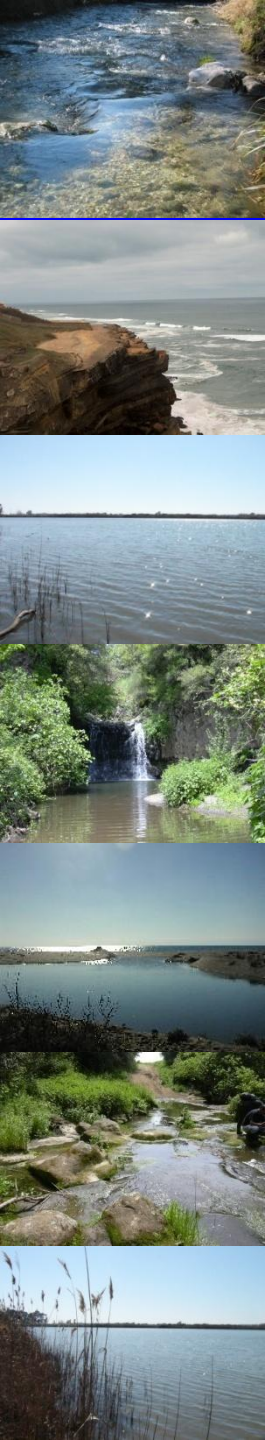
- Political acceptability
- Communication
- Compensation policy



Economic instruments for Eps - EU thanks OECD

Juridical framework:

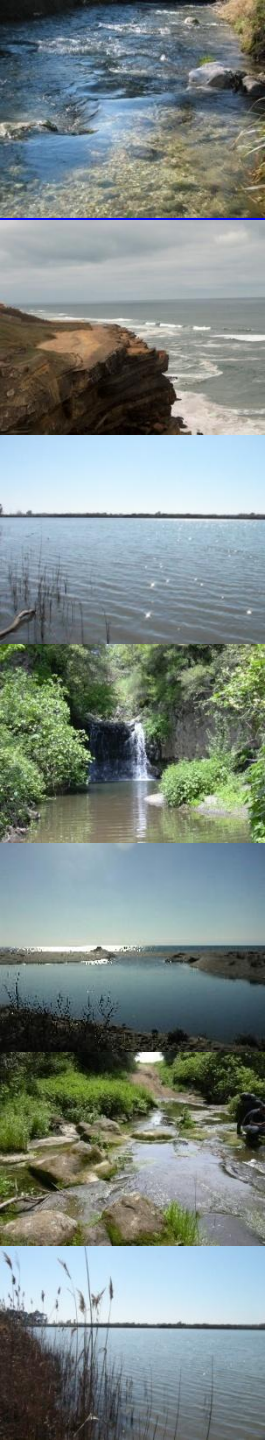
1. Polluter-Pays-Principle (PPP)
2. User-Pays-Principle (UPP)
3. Internalisation of externalities (external costs, social costs)
4. Prevention principle (it costs less to intervene earlier than later)
5. Precautionary principle (if I have two uncertain alternatives ... - irreversibility)
6. Integration Principle (of EPs and SD in sector policies - e.g energy, transport, industry - and in economic, financial and fiscal policies)
7. Sustainable development



Economic Instruments (historical) in Italy (1)

- **Tax (excise[accisa]) on fuels and energy sources; today coordination under the European ETD (Energy Tax Directive)**
- **Car taxes (purchasing and circulation)**
- **Road pricing on highways (before and after the Iri-Autostrade privatisation)**

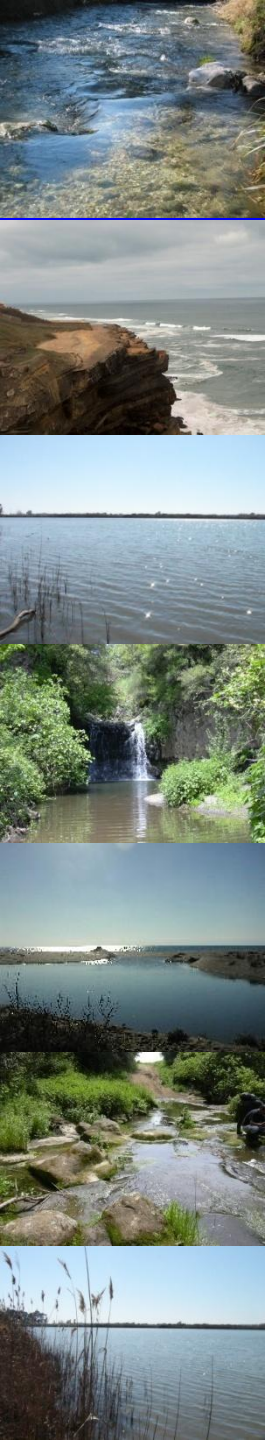
**Case: how to treat car taxation:
value, use, power, pollution, space occupation?
Decision by Netherlands to tax 2010-2020**



Economic Instruments (2nd generation) in Italy (2)

Instruments introduced in a non-systematic way:

- 1991 tax on plastic bags (with trasformations, well before the successful case of Ireland)
- 1992 water sector reform (Law Galli – principle of the full cost recovery of the integral water cycle)
- 1991-2005 contributions to consorzi di recycling consortiae (e.g. batteries, exhausted oils, packaging), then Conai system
- 1994 tax on airplanes noise, since 2000 regional, disappeared
- 1995 landfill tax (well before the successful case of Gbr)
- 1996 SO₂-NO_x emissions tax on large thermal power plants
- 1997 waste reform (Ronchi Decree) (from the tax to the tariff based on volume/quantity/quality - experiments still ongoing)
- 1997-98 incentives to car-scraping; 2° phase overtly ecological
- 1999 CO₂ tax (component of the excise on fuels), suspended after 2 years “for fear of inflation effect”; progressive, partial earmarking, impact if you decrease other components
- ...



Economic Instruments (environment-energy) in Italy (3)

Creation of markets which did not exist:

- **GHG Emissions Market (ETS)**

➤ **Problem of excluded sectors**

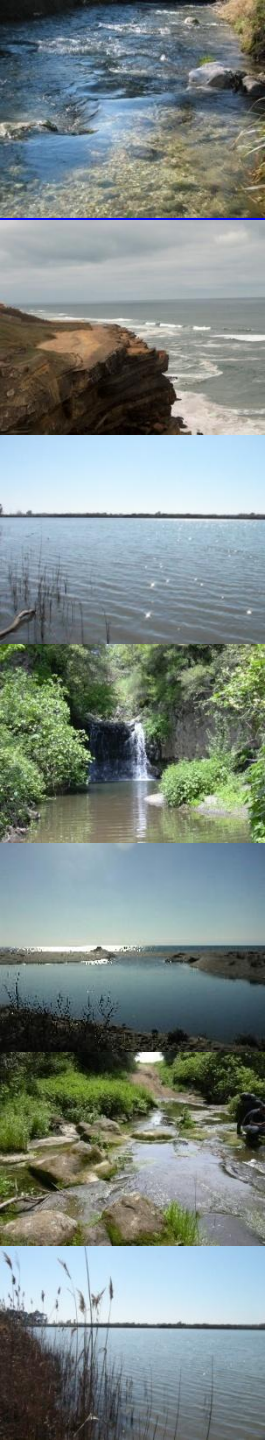
➤ **Problem of the initial attribution of rights:
historical criteria - potential development criteria -
competitive bid**

➤ **Problem of double taxation: ETS market right or
CO2 tax? Pros and Cons. Duplication or mutual
reinforcement?**

➤ **Links between European markets, with third
countries' markets, with development cooperation
(ETS, JI)**

- **Green certificates (renewables) - Feed-in tariff**

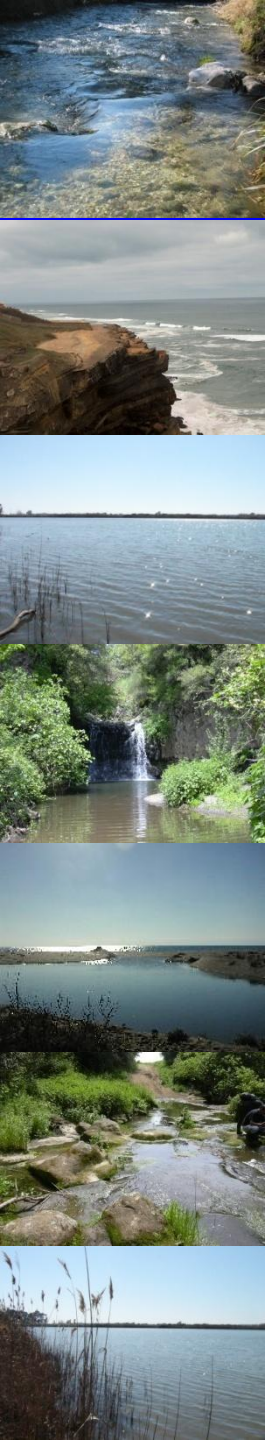
- **White certificates (energy savings)**



EHSs Environmentally Friendly Subsidies - Financial Law 2007

Introduced numerous incentives /subsidies :

- vehicle scrapping and replacement**
- polluting vehicle transformation (e.g. gas/gpl)**
- restructuring of vehicle taxation**
- solar panels, photovoltaic panels, renewables**
- energy restructuring of existing buildings**
- high efficiency of new buildings**
- replacement of industrial engines**
- high efficiency lightening of street shops**
- replacement of polluting fridges (with A+)**
- plastic bags quality**
- waste traceability**
- ...**



Use of Economic Instruments in Italy

A preliminary assessment

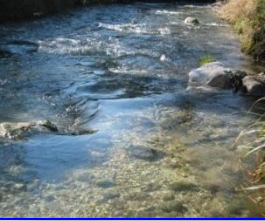
Instruments:

- ✱ **Environmental taxes: modest**
- ✱ **Environmental charges: average**
- ✱ **Market creation: average**
- ✱ **Subsidies (incentives, aids, exemptions, tax credits) environmentally favorable: average-high**
- ✱ **Elimination of environmentally harmful subsidies (incentives, aids, exemptions, tax credits): a timid start (company cars)**

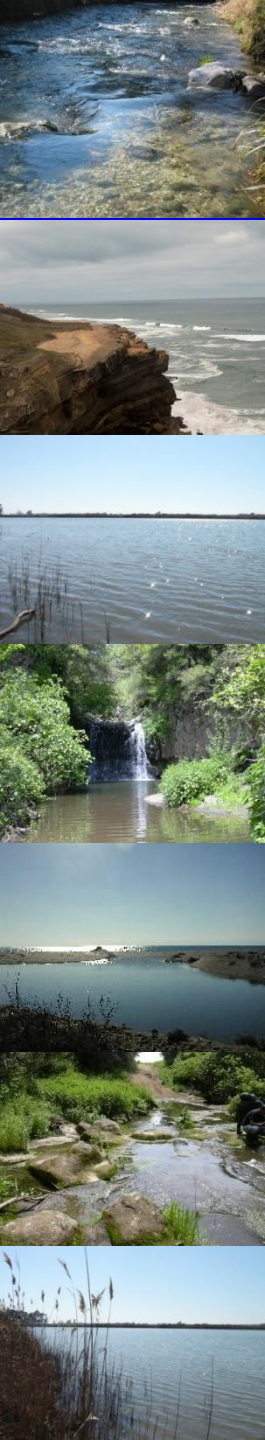
Level (effectiveness) of incentives/rates: modest

Shift of taxation from labour/firms towards pollution/natural resources: limited-nul

Wide potential for improvement...



GREEN TAX REFORMS FOR SD **(green, environmental, ecological)**

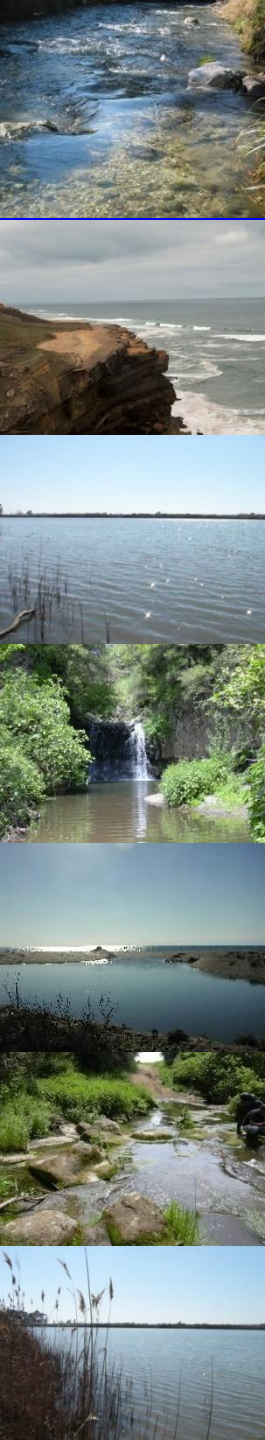


GREEN TAX REFORMS: experiences

- Overall in EU Countries (pb: unanimity rule)
- The first wave: Finland (1990); Norway (1991); Sweden (1991); Denmark (1992); Netherlands (1992);
- A second wave: Gbr (from 1993); Germany (from 1999)
- Incomplete attempts: Italy (1999), France (1999-2000)
- Recent developments: France (2008), Ireland, Sweden, China, S. Korea, Turkey

Common characteristics: fiscal neutrality, in the sense of:

- New taxes
- AND AT THE SAME TIME**
- Reduction of labour taxation
 - Reduction of other taxes (companies, investment, saving, ...)



GREEN TAX REFORMS: benefits

Systematic revision of the fiscal system in an environmentally sustainable way:

Hypothesis of Double Dividend:

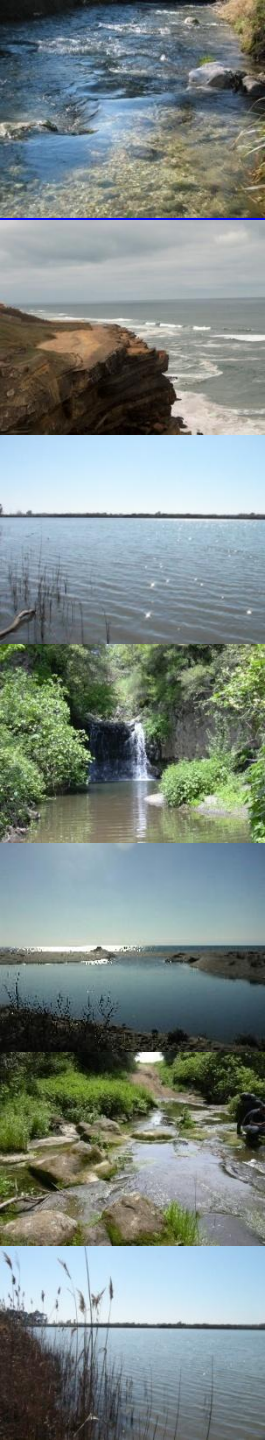
- Improvement of the environment
- Higher efficiency of the economy (starting from the fiscal system)

Some experts talk of a Triple Dividend:

- Improvement of employment

Some even of a Quadruple Dividend:

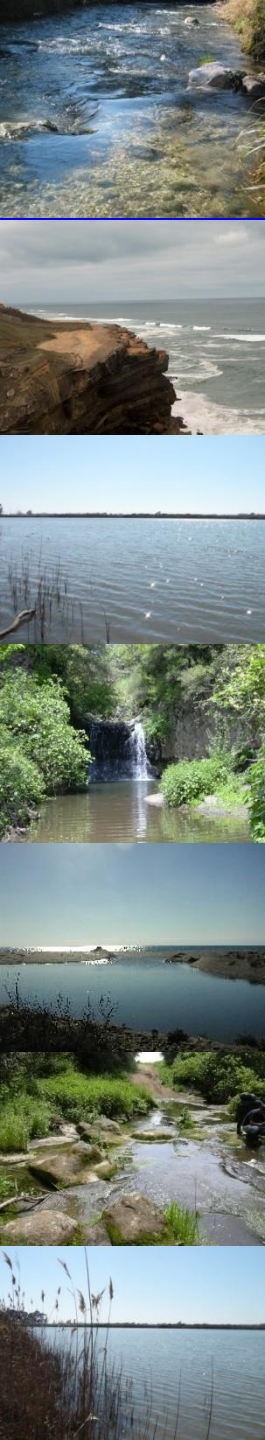
- Innovation and competitiveness



GREEN FISCAL REFORMS: fiscally neutral...

**Until nowadays they have been proposed in the form of : “fiscally neutral manoeuvre”
(from the revenue point of view,
not from the distribution point of view)**

- * Elimination of EHSs
(Environmentally Harmful Subsidies)
as an elimination of privileges & distortions**
- * Restructuring (neutrally) existing taxes**
- * Introduction of new taxes compensated with:**
 - reduction of other taxes, e.g. IRPEF-IRPEG**
 - reduction of parafiscal contributions (labour)**
 - subsidies to innovations of the hit sector**



GREEN TAX REFORMS...

and in times of fiscal consolidation?

But what happens in times of financial-economic crisis?

- increase of (yearly) public expenditure and deficit**
- and/or of (accumulated) Public Debt**
- Recovery or environment?**
- Innovation or environment?**
- Competitiveness or environment?**
- Environment as a luxury?**
- or Environment as an engine for development?**

*** Valid also in periods of increasing fiscal burden (or of decreasing fiscal burden)**

*** Valid also in periods of incoming fiscal federalism**

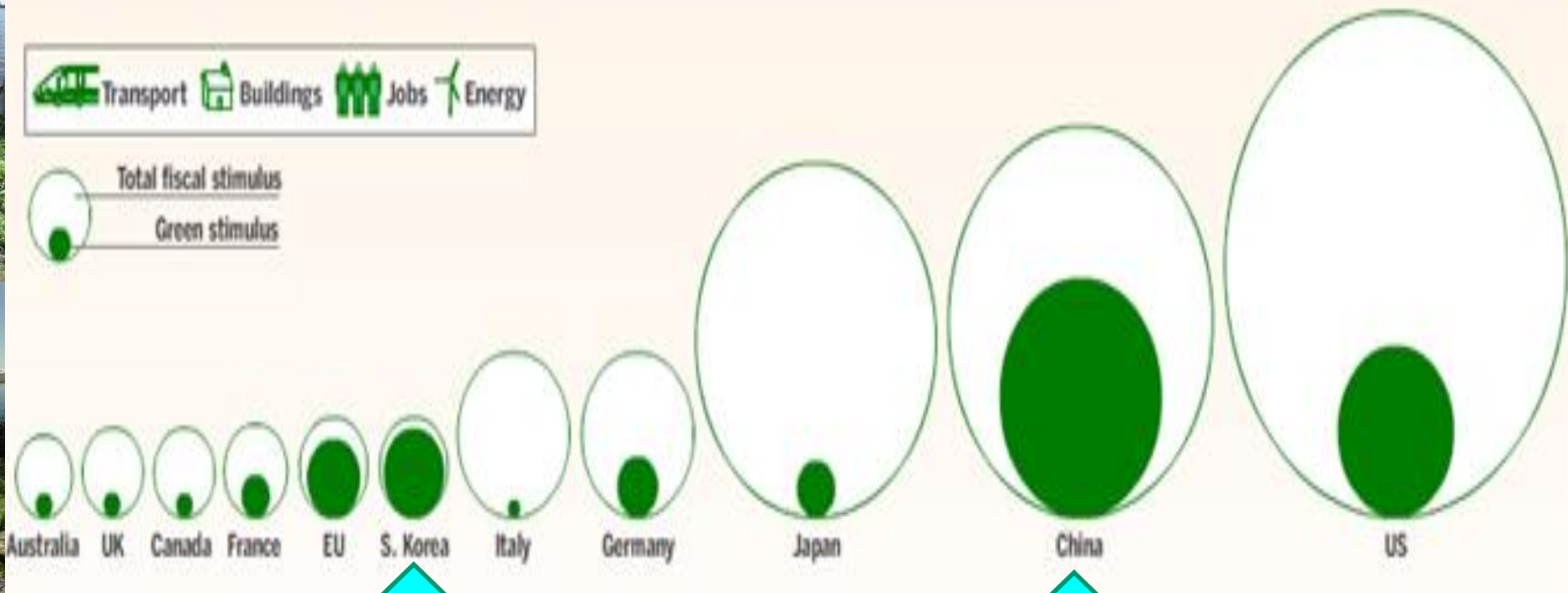
Stimulus Packages and Green Growth 2008-09

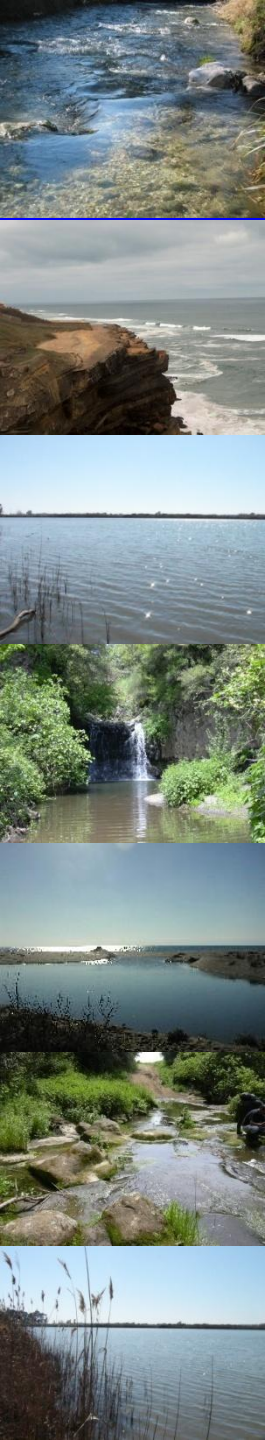
Two Asian Countries have made very green choices

Which country has the greenest bail-out?

By volume

By percentage



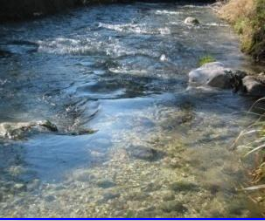


Green Fiscal Reforms attempts IN ITALY

Tentativi :

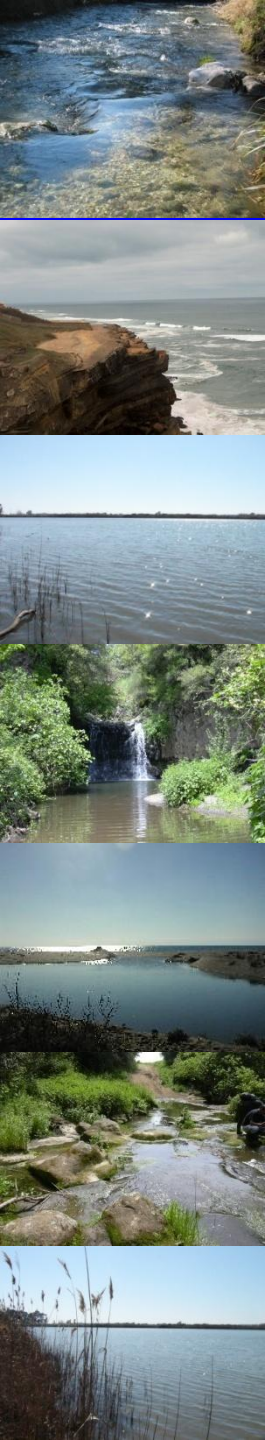
- 1990-91 Pacchetto integrato di Strumenti Economici per la Legge Finanziaria (Ministro dell'Ambiente Ruffolo) ---> tassa sacchetti di plastica
- 1992 Commissione SECA al Ministero dell'Ambiente (Strumenti Economici in campo Ambientale) (Ministro dell'Ambiente Ripa di Meana) ---> elezioni anticipate
- 1994 Libro Bianco del Ministero delle Finanze include una riforma fiscale con spostamento della tassazione dal lavoro e dal capitale verso l'energia e le risorse naturali (Ministro delle Finanze Tremonti) ---> elezioni anticipate
- 1997 1° Conferenza Nazionale sulla Fiscalità Ambientale ---> componente CO2 delle accise sui carburanti (1999);
Ministri dell'Ambiente Ronchi e delle Finanze Visco





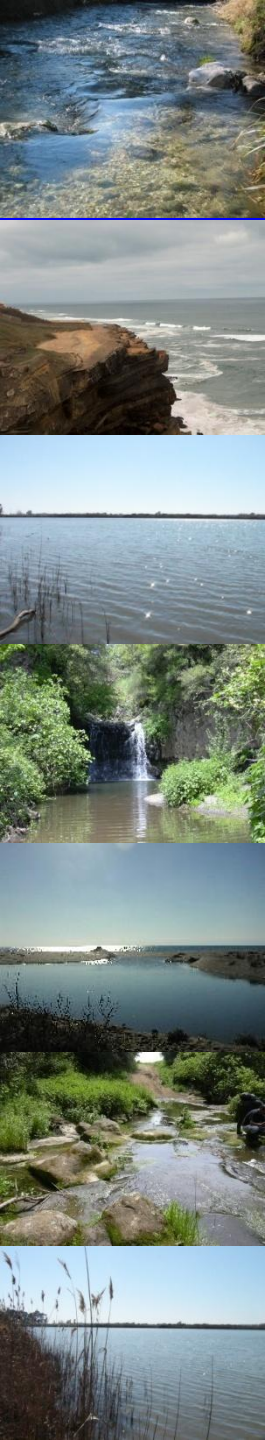
Windows of Opportunity for Environmental Fiscal Reform

The Government 2012 Proposal for Environmental Fiscality within a Generakl Tax Reform



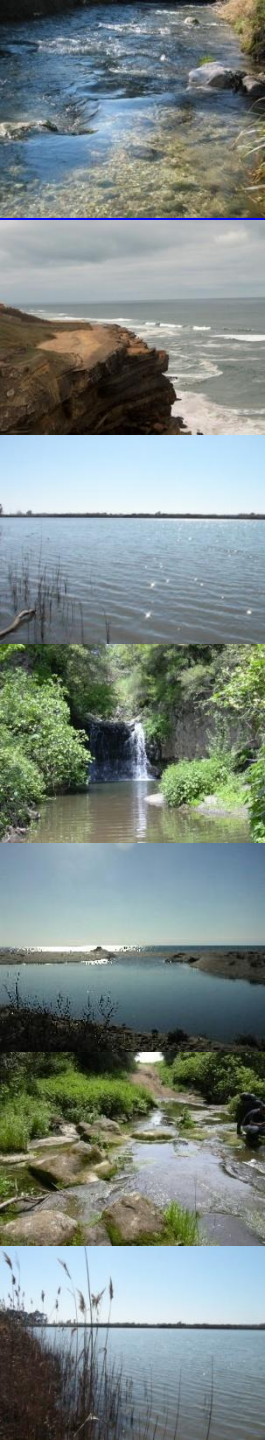
LEGISLATIVE WINDOWS OF OPPORTUNITY

- Government: approved a project of General Tax Reform including for the first time ever an explicit element of Green Fiscal Reform
- Parliament: should have approved the delegation to the Government to design details and implement it in the following 9m.
- For environmental taxation, powers would be very wide
- Recognizable principles of GTR and EFR:
 - A) Growth
 - B) Fiscal Consolidation (burden shift)
 - C) Social Fairness



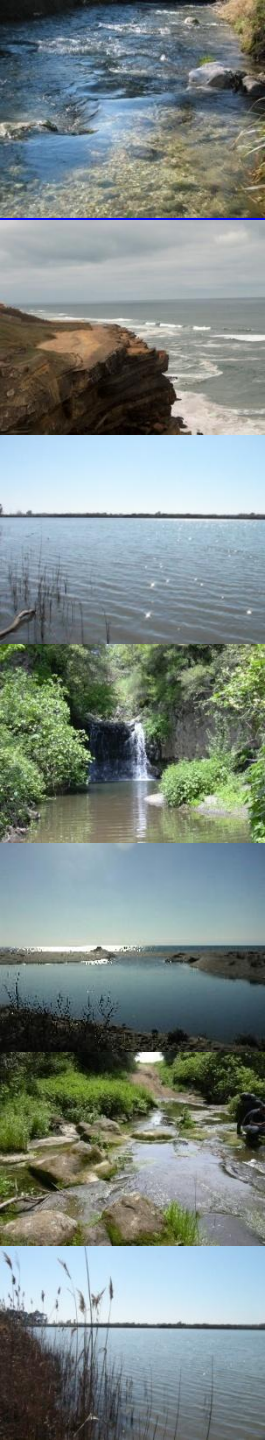
MAJOR ELEMENTS OF THE PROPOSED EFR

- CO2 Tax only on non-ETS sectors (e.g. UK is taxing progressively also ETS sectors)
- CO2 Tax revenue used with priority to finance renewables & energy efficiency (replacing feed-in tariffs financing thru electricity bills) and eco-innovation
- Phasing out of EHSs (esp. excise tax)
- Any other measure possible
- Entry into force linked to European Directives and Regulations (mainly ETD)



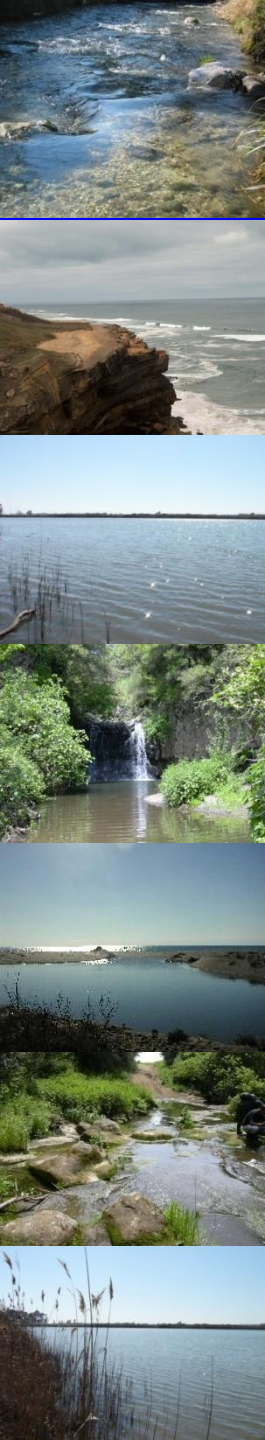
ECONOMIC WINDOWS OF OPPORTUNITY

- Economic-Financial Crisis 2008-2009-...
- Heavy (accumulated) Public Debt (reached 120% of GDP, reduction started)
- EU Maastricht Parameters for Convergence (public deficit 3%, public debt 60%, inflation +1,5%, exchange rate stability, long-term interest rate +2%)
- If we had chosen other parameters, e.g. private debt, Gini index, employment rate, may be history would be different



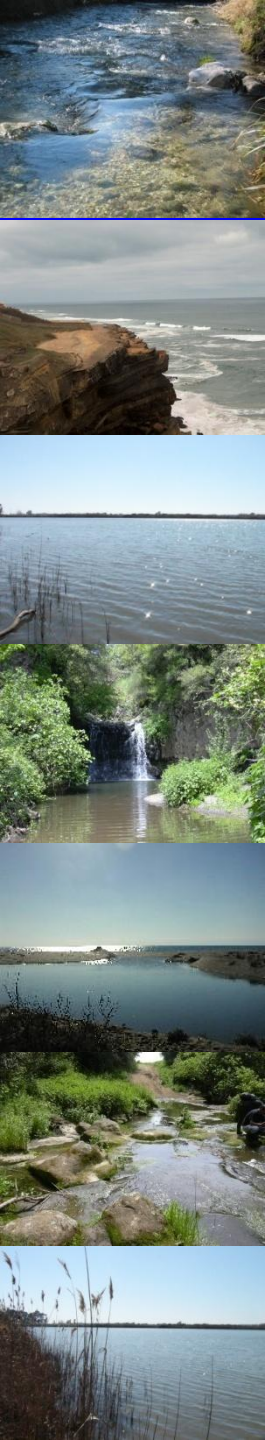
POLITICAL WINDOWS OF OPPORTUNITY

- + Technical Government (Anti-Crisis, Emergency)
- +/- Short-term perspectives (18 months), credibility of initial measures (Save-Italy, Simplify-Italy, Grow-Italy)
- In the first 6m. 2012: Fuel P+20%, C-10%
- + Does not need to be re-elected (Monti “my constituency are the future generations”)
- +/- Citizens/Consumers/Voters irritation with inefficiencies in public expenditure and with the fiscal burden



GOVT WINDOWS OF OPPORTUNITY

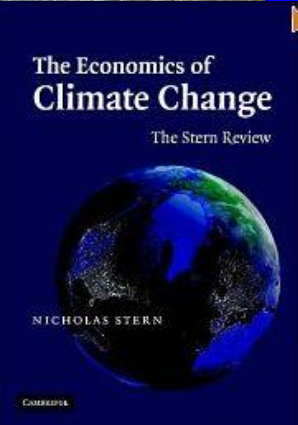
- Ministry of Economy & Finance looking with priority for funds, tax revenue stability, revision of the tax system
- Ministry of Development looking with priority for competitiveness and innovation
- Ministry of Environment looking with priority for funds for environmental policies, eco-innovation and solve ecological crises (climate, waste, water, biodiversity, contaminated sites, ...)
- Equilibrium to be found



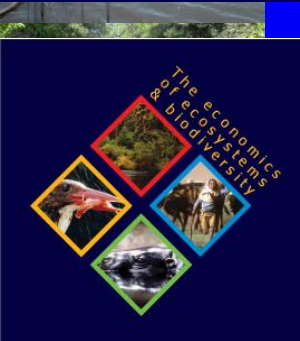
KNOWLEDGE WINDOWS OF OPPORTUNITY

- OECD (e.g. GTRs, EHSs, Green Growth)
- UNEP (e.g. Green Economy, Resources)
- EUROPEAN ENVIRONMENT AGENCY (e.g. Country workshops)
- EUROPEAN COMMISSION (e.g. White Paper, MBI Forum, Euroep 2020, White Paper Delors)
- EAERE-ISEE-GCET Scientific Conferences
- GREEN BUDGET EUROPE (support to EU Country Presidencies and EC, annual conferences, researches, beyond Europe)

ONGOING WORK : global research projects



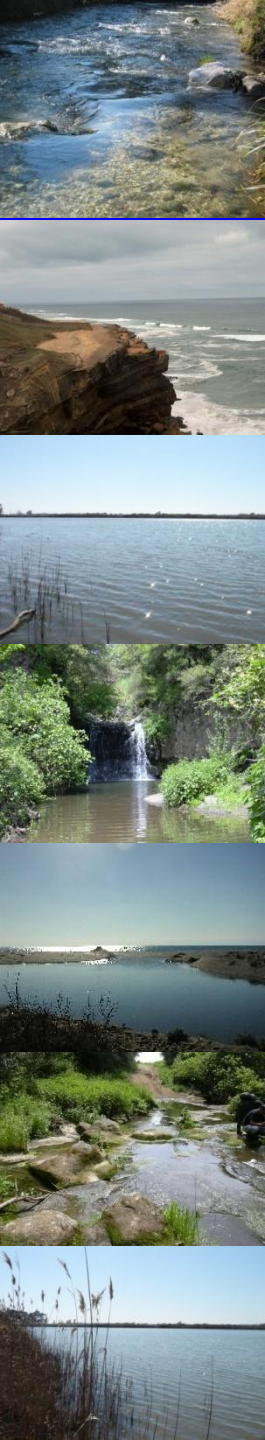
- Nicholas Stern (2006), "The Economics of Climate Change - The Stern Review ", HM Treasury, London
- Nicholas Stern and James Adams (2009), "The Global Deal: Climate Change and the Creation of a New Era of Progress and Prosperity", Library Edition



- Pavan Sukhdev ed. (2010 e 2011), "TEEB - The Economics of Ecosystems and Biodiversity", vol.1 "TEEB: Ecological and Economic Foundations , vol.2 "TEEB in National and International Policy Making", Earthscan, London

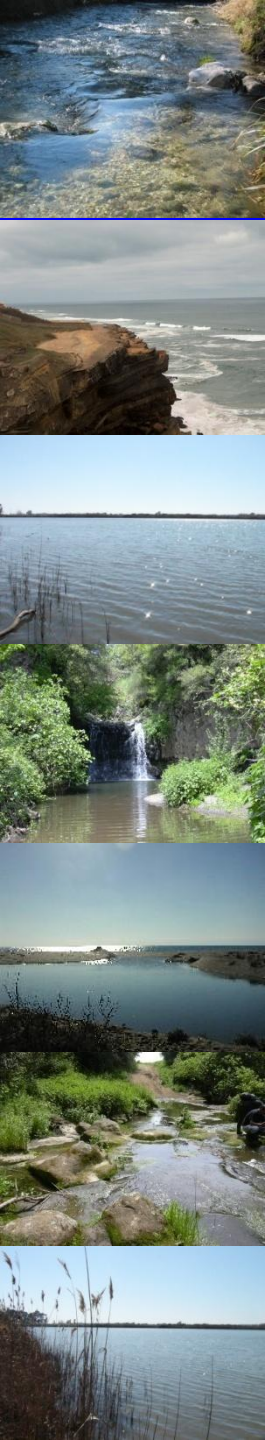


- E. Von Weizsaecker et al. (2009), "A Long-Term Ecological Tax Reform", ch.7 in "Factor 5 - Transforming the Global Economy through 80% Improvements in Resource Productivity", Earthscan, London



POLICY WINDOWS OF OPPORTUNITY

- OECD Environmental Performance Review of Italy 2013: EFR, CO₂, Water, Waste, EHSs, ...
- STATES GENERAL OF GREEN ECONOMY 2012 (Recommendations 4&5)
- EUROPEAN SEMESTER Recommendations 2012-13-14: Fiscal Shift
- Reduce the “cuneo fiscale” (Letta Government)



Conclusions

- In normal times: Environmental Tax Reforms and Fiscal Neutrality
- In crisis times: Dynamic Neutrality: the tax burden shift can be applied even in times of increasing taxation (or decreasing)
- Must be ready for when the train passes by
- «*Taxes are the price we pay for a civilised society*» (F.D. Roosevelt)





Our Pledge

**“We’ll immediately
legislate to scrap
the Carbon Tax.”**

Tony Abbott.

www.realsolutions.org.au

Sustainable development - AUSTRALIA

- “Carbon tax is out!” first words of the Australian elections winner Tony Abbott



- In the programme: repealing the mining and carbon taxes; abandoning ETS

Sustainable development - AUSTRALIA

- Climate Change: what is the problem
- Climate Change: are there solutions?
- Better use economic instruments, regulatory instruments or voluntary instruments?
- Better a carbon tax, creating a market (e.g. an emissions trading scheme) or put standards?
- International agreement or national policy?







Sustainable Development - MOROCCO

Morocco: petrol products subsidies

	Dirham Billion	Euro Billion	GDP %
2006	7,4	0,7	1,3
2007	10,7	1,1	1,7
2008	24,2	2,4	3,5
2009	7,2	0,7	1,0
2010	23,7	2,4	3,1
2011	44,5	4,5	5,5



Abdel
Benkiran,
1st Minister

ex.	gasoil	-21%
2011	diesel	-35%
	some fuel oils	-60%
	gaz butane	-68%

Estimates by Caisse de compensation



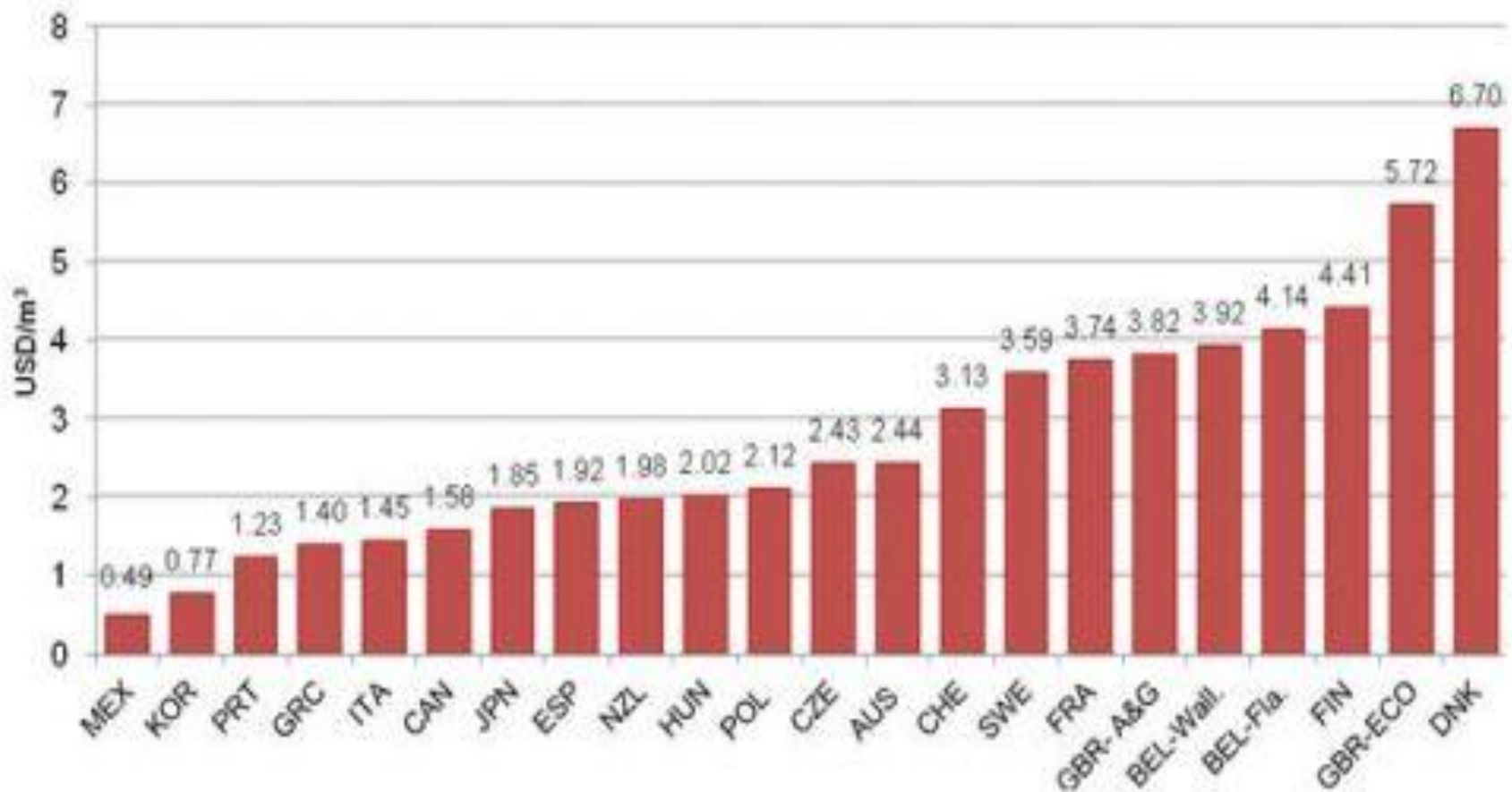
Sustainable Development - MOROCCO

- Are fossil fuel subsidies in Morocco an exception?
- Subsidies to fuels: is this the best way to guarantee sustainable development?
- In economic, environmental, social terms?
- Are there better social policies?
- Are subsidies only for consumers?
- What about producers?
- How do we measure and compare?
- Any space for international action?



Sustainable Development - IRELAND

Figure 2. Unit price of water supply and sanitation services to households, incl. taxes (USD/m³)



Source: OECD estimates based on country replies to the 2007-08 survey when available, or public sources validated by the countries

Sustainable Development - IRELAND

- Ireland last country in EU and OECD to not pay water charges - free water
- Consequences:
 - waste by consumers and producers
 - worsening of urban water quality
 - worsening of underground waters
 - difficulties for financing new infrastructures
- South Africa uses low first low consumption brackets (progressive)



COMMISSION ON TAXATION
AN COIMISIÚN UM CHÁNACHAS

REPORT 2009



Sustainable Development - IRELAND

- The Commission on Taxation (for a general tax reform) has proposed i.a. (Frank Convery):
 - CO2 tax
 - Water charges (from 1.1.2015)
- Media, politicians, consumers against:
 - the introduction of water tariffs (100%) first;
 - the recent discovery of the VAT application (13,5%)



COMMISSION ON TAXATION
AN COIMISIÚN UM CHÁNACHAS

REPORT 2009