Comhar Submission to Department of Finance
On Proposals for a Carbon Energy Tax

1. Background

This submission sets out Comhar’s recommendations in response to the Department of Finance’s Consultation Paper (CP) regarding the proposed introduction of a carbon energy tax in Ireland. In particular, views have been sought on answers to the following 7 questions:

(Q1) The appropriate rate (or rates) of tax;
(Q2) Whether and how the rate or rates should be phased in;
(Q3) The appropriate collection mechanisms;
(Q4) Whether there should be rebates for those with legally binding negotiated agreements;
(Q5) The impact on competitiveness;
(Q6) The impact on households and the appropriate mechanism if low income households were to be compensated; and
(Q7) Whether and how any revenue recycling should operate.

2. International context

Many of the assumptions underlying the Irish “business as usual” energy framework now face substantial challenges within the context of an increasingly globalised world dominated by political, economic and environmental considerations that were not foreseen in the early days of Irish energy policy formation.
UNFCCC\(^1\) has been in force in Ireland since 1994. Ireland has therefore been committed for almost 10 years to:

“adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.” (UNFCCC, Art. 4.2.a).

Arguably, from one view, Ireland has “limited” its emissions of greenhouse gases since 1994, since TPER\(^2\) and energy related CO\(_2\) have both risen less slowly than GDP since then (in other words, the carbon intensity of Irish GDP has fallen). In the last decade:

- GDP increased 102%
- Employment rose from 1.1 million to 1.7 million
- Unemployment fell from 16% to 4%
- Industrial production rose 225%
- Primary energy requirement up 48%
- Industrial energy consumption rose 32%
- Energy intensity reduced 4% per annum, the second best figures in EU.

At the same time:

- Ireland is now the EU member State furthest off target on the EU Distance to Target indicator for progress on Kyoto Protocol commitments.
- Ireland has amongst the slowest installations rates of renewable energy in the European Union.
- Ireland currently has the fourth highest rate of per capita emissions of greenhouse gas emissions in UNFCCC.

\(^1\) United Nations Framework Convention on Climate Change
\(^2\) Total Primary Energy Requirement
The requirement in UNFCCC is not to limit GDP, but rather, to limit greenhouse gas (GHG) emissions. The overall objective is:

“stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system...and to enable economic development to proceed in a sustainable manner.” (UNFCCC, Art. 2).

3. Scope of the Tax

RECOMMENDATION 1: For the purposes of equity all greenhouse gas emissions from all sources should in principle be included. The National Climate Change Strategy planned:

“The development of a broad greenhouse gas taxation regime, across all relevant sectors and gases, will assist in ensuring identification of the least cost approach for the economy as a whole in meeting our commitments.”

The policy set in the Strategy was as follows:

“Appropriate tax measures, prioritising CO2 emissions, will be introduced from 2002 on a phased, incremental basis across a broad range of sectors in a manner that takes account of national economic, social and environmental objectives.”

There are practical limitations to the range of emissions to be included in the tax. However, the strategy’s intention of a broad taxation regime is not being implemented by the current restriction to “carbon energy”. This is arbitrary. Exemptions from the scope of the tax reduce its environmental effectiveness, increase the burden it imposes on the economy and introduce unfairness into
its operation. The scope of the tax should be limited only by practical considerations. Anything else could introduce arbitrariness and unnecessarily reduce the effectiveness of the tax. Indeed it could constitute a state aid.

4. Questions posed by the Department of Finance

Many of the answers to these questions are already defined by NCCS. These are worth repeating, not alone for the purposes of this consultation, but also because NCCS is itself counted amongst the significant “policies and measures” Ireland is taking under Art 4.2 of UNFCCC.

NCCS commitments on taxation:

“Government will put in place an appropriate framework for greenhouse gas taxation, prioritising CO2 emissions, from 2002 on a phased, incremental basis and in a manner that takes account of national economic, social and environmental objectives.

The Government’s approach:

- allows for advance notice, providing a signal to economic actors well ahead of the impact of the increasing levels of taxation;

- provides policy certainty for industry and economic actors;

- meets the economic requirement for decisions on planned investment to be taken in a rational and efficient manner;

- will ensure avoidance of disruptions and minimise impacts on the Consumer Price Index (CPI) by increasing taxes in a planned and predicted manner;

- will incorporate overall tax recycling; and
• will identify and remove any subsidies supporting inefficient use of energy.”

Clearly, the fact that this consultation is only under way in 2003 means that there is already a substantial delay on implementation of all primary recommendations of the NCCS.

The NCCS states:

“Early action is essential. Not undertaking action as soon as practicable and on a progressive basis could involve meeting large reductions very abruptly in the commitment period, adding to the potential costs of achieving the required reductions. There are potential disincentives to early action:

• legally binding commitments do not arise until 2008 – 2012;

• policy conflicts at a sectoral and inter-sectoral level;

• uncertainty as to when competitor firms will take action;

• a desire to delay early actions with cheap reduction potential for a number of reasons, for example, to save low cost reductions for a later stage to reduce the costs of complying with tax requirements when implemented, or to maximise emissions allocations under an emissions trading system.

The appropriate balance and timing of measures must be achieved. The Green Paper on Sustainable Energy sets out a number of considerations to be taken into account in the energy sector. These will be evaluated in determining the optimal timing for action, and similar considerations will arise in relation to other sectors. In this evaluation process, the cost to the economy of not taking early action will be factored in.”

3 (NCCS, p.27, emphasis in original)  
4 (NCCS, p.23, emphasis in original)
From the standpoint of 2003 - three years on from the adoption of NCCS - it is clear that concerns about the effects of these disincentives were thoroughly grounded almost to the point of prescience. The “joined up thinking” required to tackle them has been distinctively absent within Irish energy and fiscal policy formation, as various government Departments responses to the Tax Strategy Group papers show.

This policy inertia at government level is of the very type most warned against by the IPCC:

"Unlike the climate and ecological systems, inertia in human systems is not fixed; it can be changed by policies and choices made by individuals. The capacity for implementing climate change policies depends on the interaction between social and economic structures and values, institutions, technologies, and established infrastructure. The combined system generally evolves relatively slowly. Anticipatory action, based on informed judgement, can improve the chance that appropriate technology is available when needed."

Additionally, and crucially, from Comhar’s perspective, a priority “guiding principle” of NCCS is the promotion of sustainable development:

“National sustainable development policy is grounded on:

- the precautionary principle, which requires that appropriate action be taken where significant evidence of environmental risk exists, and places emphasis on dealing with the causes, rather than the results, of environmental damage;

- the integration of environmental considerations into other policies as a fundamental means of decoupling economic growth and

---

5 Intergovernmental Panel on Climate Change, Synthesis Report, 2001, p.18
environmental degradation and promoting economic and environmental efficiency;

- **the polluter pays principle**, which correctly allocates the costs of pollution, energy consumption and environmental resource use, and the production and disposal of waste to the responsible polluters and consumers, rather than to society at large or future generations. Cost internalisation, including through market-based economic and fiscal instruments, provides a more balanced and full measurement of national growth and prosperity;

- **shared responsibility**, which requires broadly based involvement by public bodies, private enterprise and the general public to achieve sustainable development objectives;

- **social equity**, which requires that sustainable development must be achieved in the context of policies which reduce poverty and social exclusion and build an inclusive society.  

Recommendations in this paper are drawn against these (already adopted) national sustainable development policy priorities, in particular:

**RECOMMENDATION 2**: The precautionary principle dictates that early action is essential, and must address the causes of the problem. Currently proposed fiscal action against greenhouse gas emissions must therefore both apply and account for previously delayed action.

In the light of existing national climate and sustainable development policies therefore, a number of recommendations can be made with regard to the questions posed in the current consultation:

---

6 (NCCS, p.21)
(Q1) The appropriate rate (or rates) of tax.

RECOMMENDATION 3: Comhar believes that the rate of the tax should be at a level sufficient to provide for appropriate de-carbonisation measures and off-set the cost of compensatory measures for less well-off households.

A number of factors need to be taken into account in setting the rate of the tax. These include:

- **The estimated purchase price of emissions trading allowances.** Possible prices for emission permits within both the Kyoto Protocol (KP) and the European Emission Trading Scheme (ETS) are subject to great uncertainty. Various models predict prices ranging between as low as € 2 / tonne CO₂ to as high as € 40 / tonne CO₂ within both the 1st Commitment Period (FCP) of the KP and the first period of the ETS (2008-2012). Uncertainty constitutes a disincentive to early action as previously described. However, the European Commission has for some time applied - on a precautionary basis - the figure of € 20-€ 25 / tonne CO₂ as an indicative guide price for “cost effective” CO₂ abatement measures in the EU within the FCP. Most of the costings applied in this study are based on the lower of these two figures.

- **The cost to the economy of possible national non-compliance with Kyoto obligations.** The overall cost to the economy of non-compliance with KP commitments depends on a) the degree of non-compliance (quantity of CO₂) and b) the aforementioned price range.

- **The level of penalties for non-compliance by participants in the ETS.** These are already fixed at € 40 / tonne CO₂ in the pilot phase (2005-2007) and € 100 / tonne CO₂ in the first period (2008-2012).

- **Carbon damage estimates.** Due to the transboundary nature of climate change, these are largely unquantifiable in any sort of potentially accurate terms in Ireland either on an onshore basis or as a share of global costs.
Cost of non-compliance with Kyoto obligations can be taken as a reasonable interim proxy.

- *Rates of tax and tax allowances/rebates in competitor economies.* These will be considered under Q5.

- *The funding required to underpin a national de-carbonisation fund based on sustainability principles.* If Irish energy and fiscal policies had been re-adjusted in 1992 to take account of UNFCCC commitments (or even postponed until entry into force in 1994), the country, almost inarguably, would not be facing the sort of policy challenges and difficulties it now finds itself in. Many European competitor economies did precisely this and are now far better positioned *vis à vis* Kyoto commitments, RES directive targets and future energy market opportunities than Ireland currently is.

The recommendations made by Comhar that follow hereinafter are configured against this perspective, re-inforced by the previous recommendation concerning early action and application of the precautionary principle.

The strategy is to attempt to recapture lost ground by creating a “national decarbonisation fund” drawn on the tax rates and revenues as proposed in the Consultation Paper by the Department of Finance. This fund is then 100% hypothecated for action against climate change and in favour of creating a sustainable, competitive economy and society based on Ireland’s plentiful supplies of available indigenous renewable energies. It will also assist in developing cleaner processes and equipment, capacity building in Irish society, and raising of awareness regarding climate change.

Set against this perspective, it is possible to answer Q1 and Q2 together:

(Q1) **The appropriate rate (or rates) of tax.**

(Q2) **Whether and how the rate or rates should be phased in.**
RECOMMENDATION 4: The tax should be introduced on Jan 1st 2005 at € 7.50 / tonne CO₂, escalating on an annual basis, where appropriate, and measured for effectiveness through the bands proposed (TSG 02/23 10) so that it reaches € 20 / tonne.

A full review of the proposed rate for 2008 should be undertaken early in 2006 with a view to assessing its adequacy (or not) for achieving sufficient progress for the Kyoto target to be met by the end of the FCP. This will allow for the rate for 2008 and likely rates for subsequent years to be announced in Budget 2007, a year ahead of 2008.

Without access to a dynamic model of the tax rates, elasticities and decarbonisation effects employed by DEHLG, it is only possible to take point estimates of rates and revenue from the data provided and scale accordingly, on a non-index-linked, undiscounted basis over the period concerned. In particular, modelling a fund without trading poses particular difficulties due to the likely - indeed, desired - dynamic effects between trading and taxation. For the period 2005-2007 at least, therefore, it is assumed - broadly in line with DEHLG modelling - that the ETS covers approximately 40% of energy related CO₂ emissions.

These assumptions provide a scale of rates and introduction of rates as below:

<table>
<thead>
<tr>
<th>(Estimated revenues, 2003 projected)</th>
<th>(reduced fund with trading)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 @ € 7.50 = € 316 million</td>
<td>( € 208 million )</td>
</tr>
<tr>
<td>..... @ € 10.00 = € 420 million</td>
<td>( € 278 million )</td>
</tr>
<tr>
<td>..... @ € 15.00 = € 623 million</td>
<td>( € 411 million )</td>
</tr>
<tr>
<td>..... @ € 20.00 = € 823 million</td>
<td>( € 543 million )</td>
</tr>
</tbody>
</table>
RECOMMENDATION 5: Comhar supports the introduction of the most cost-effective and efficient arrangements. The tax should be collected on the same basis as excise duties, i.e. earliest point of supply with the minimum number of collection points.

Arguably, and perhaps surprisingly to some, from the perspective of future sustainability and associated decarbonisation in Ireland, this is the most crucial question asked in the consultation.

As the consultation paper recognises, the most efficient method is to collect the tax upstream, parallel to existing excise collection on those fuels to which excise currently applies.

For those fuels not currently subject to excise however (natural gas, coal, turf), new collection arrangements will be needed. The problems associated with this are not insuperable however, particularly since there is a large degree of upstream control of gas and turf by very large State entities. Revenue from the tax is thus available for State expenditure almost overnight following introduction of the tax. This has distinct implications for the requirement for early action, as mentioned previously.

Two crucial questions are not answered by this response however: a) what becomes of the tax? and b) will it be passed on?

To take the second of these first, it is almost certain that, due to market forces, the tax, will in fact, be passed downstream to ultimate consumers. The DEHLG estimates for decarbonisation effects (resultant emission reductions) are in fact predicated on this idea, subject to various assumptions regarding price (in)elasticities.
The question remains, however, to what extent, and to who is the tax passed on?

One approach would be to actively require full transmission, in a visible manner as in the case of VAT, as previously suggested.

(Q4) Whether there should be rebates for those with legally binding negotiated agreements.

RECOMMENDATION 6: Comhar acknowledges that this is a complex issue and that overall policy must be guided with a view to measuring effectiveness, acceptability and equity as previously recommended.

(Q5) The impact on competitiveness.

Comhar acknowledges that the introduction of the tax has the potential for both positive and negative impacts on the competitiveness of different sectors. The report on the Competitiveness of the Enterprise Sector, etc. prepared for Forfas and the Department of Enterprise and Employment should be published in order to facilitate further debate.

As already mentioned, many of the answers to this consultation call can already be found as adopted government policy in NCCS. This is particularly the case with the answer to this question:

“Competitiveness is a moving target in a changing context. The successful adaptation to continuing change is the dynamic expression of competitiveness.

It is clear that once the Kyoto Protocol enters into force and implementation of the necessary measures to meet national targets gathers pace, one of the main drivers of international

---

7 para. 13.1
8 NESC in Opportunities, Challenges and Capacities for Choice (December 1999).
environmental and economic policy will be climate change. The Government is satisfied that the initiation of early action in Ireland will assist in preparing the economy to meet these competitiveness challenges.

Ireland will also vigorously support the adoption of common and coordinated policies and measures, within the EU and under the Protocol, including supporting relevant harmonisation of tax and other measures to implement the EU abatement strategy.

Further protection of competitiveness will be achieved by taking those steps which are least-cost, and using market-based instruments to assist affected sectors identify and benefit from the cheapest mitigation options.

Economic instruments, which generate cost and other efficiencies, also create an incentive to better environmental performance, and can assist in promoting technological innovation and developing and exploiting new markets and potential opportunities.”

Attitudes to the future are critical drivers in both standard economics and in the fight against climate change, as NCCS already recognises.

Technically accessible Irish renewable resources exceed those available in most competitor economies when considered on a per capita basis for most renewable energy resources. This is particularly the case with regard to the potential Irish wind resource. The ESBI/ETSU study (1997) evaluates total Irish renewable energy resources at over 100 times installed electricity capacity in Ireland in that year.¹⁰

The difference between “technically accessible” and delivered supply, however, is largely a question for markets (particularly capital markets) and the fiscal incentives that determine ultimate margins within these markets.

---

⁹ NCCS, p.22

¹⁰ Green Paper on Sustainable Energy, DPE, 2000, p. 111
RECOMMENDATION 7: A decarbonisation fund aimed at incentivising Irish renewable energy potential and energy efficiency confers a “win-win” advantage from the perspective of both the current competitive position and compliance with Kyoto targets.

(Q6) The impact on households and the appropriate mechanism if low income households are to be compensated.

Comhar acknowledges that the introduction of carbon taxation will have an impact on low-income households and supports the introduction of a compensatory package to be effected through the social welfare system and other supporting measures.

The ESRI has, over the years since 1992, done much work on modelling household effects of carbon taxes, and has proposed a number of recycling mechanisms to address the potentially regressive effects of the tax on, particularly, low-income households.

Most of the options proposed do not assume decarbonisation as a priority, and therefore do not assume hypothecation of carbon tax outside of general exchequer priorities in existing areas of concern, concentrating particularly on poverty, labour taxes and national (fiscal) debt. Sustainability concerns are not therefore fully addressed in the ESRI models.

The DSCFA\textsuperscript{11} response to the DEHLG carbon tax proposals\textsuperscript{12} is more in line with the general thrust of the recommendations made here.

In particular, DSCFA favour recycling of the tax for capital investment over reductions in labour taxes from a perspective of a decarbonisation “double dividend”, citing particularly the competitiveness considerations, much as Comhar has already done here:

\textsuperscript{11} Department of Social, Family and Community Affairs\textsuperscript{12} TSG02/23, 40-46
“In relation to competitiveness and revenue recycling, the Department supports the view (Para 40 of D/ELG paper) that the "double dividend" referred to may be best achieved through capital investment rather than by reducing taxation or social insurance (PRSI) contributions. PRSI contributions and unemployment are already very low in Ireland compared to the position in other OECD States. The objective of any reductions in social insurance contributions in other States is to approach the levels that are already in place here. For that reason, the "double dividend" issue does not arise in relation to reductions in PRSI.

In any event, as there is no link between PRSI and energy use, reductions in PRSI cannot encourage fuel switching. Any reductions would necessarily apply to all contributors within any given PRSI category regardless of their energy use status or behaviour. Furthermore, the amount of revenue recycled would be in direct proportion to wage levels and also, in the case of Employer's PRSI, the numbers of employees. Apart from being incoherent from a policy perspective, reducing PRSI to mitigate the impact of greenhouse gas taxation would lead to perverse outcomes in terms of the net revenue effect at the level of the individual or firm, in the case of enterprises that are both relatively labour intensive and relatively low energy users (e.g. financial institutions, supermarkets, contract cleaners).”

Sustained national investment in, and development of, a public supply of renewable energy electricity - which is therefore untaxed - ultimately benefits everybody, and particularly the poor, since energy prices are then gradually reduced - as opposed to increased, as they will be as fossil fuels become scarcer.

However, this does not assist poor households in the short, or possibly even the mid term. Dedicated anti-poverty decarbonisation measures will therefore be required. This is not a new idea. Energy efficiency programmes such as
those run by Energy Action are already supported fiscally through DSCFA and other State agencies.

Adding decarbonisation as a priority in the form of direct installation of solar and heat pump technologies is not only technically feasible already in Ireland, but is comparable to programmes already under way in many competitor economies (German 100,000 roofs programme).

**RECOMMENDATION 8:** A national programme, should be introduced involving direct provision of renewable energy retrofits by local authorities, financed initially by the fund, in combination with projected returns from existing DSCFA expenditure against fuel poverty. Also provision for accelerated capital allowances against carbon and/or capital taxes for non-poor households, financed pro rata by either carbon fund and/or existing exchequer.

(Q7) Whether and how any revenue recycling should operate.

**RECOMMENDATION 9:** Comhar recommends the introduction of revenue recycling which should include measures to compensate low-income households and a decarbonisation fund.

21st October 2003