

**our mission** is to promote and assist the development of sustainable energy



# Annual Report 2004



# Our mission is to promote and assist the development of sustainable energy

We have a mandate to promote and assist the environmentally and economically sustainable production, supply and use of energy, in support of government policy, across all sectors of the economy.

## Functions of Sustainable Energy Ireland (as defined in the Sustainable Energy Act, 2002):

- > To promote and assist environmentally and economically sustainable production, supply and use of energy
- > To promote and assist energy efficiency and renewable sources of energy
- > To promote and assist the reduction of greenhouse gas emissions and transboundary air pollutants associated with the production, supply and use of energy
- > To promote and assist the minimising of the impact on the environment of the production, supply and use of energy
- > To promote and assist research, development and demonstration of energy efficiency and renewable energy technologies
- > To provide advice, information and guidance:
  - \* to the Minister for Communications, Marine and Natural Resources, and such other Ministers or bodies as the Minister may direct
  - \* to energy suppliers and users



*Sustainable Energy Ireland is funded by the Irish Government under the National Development Plan 2000-2006 with programmes part financed by the European Union.*

**Sustainable Energy Ireland**  
Glasnevin, Dublin 9, Ireland

t +353 1 836 9080  
f +353 1 837 2848  
e [info@sei.ie](mailto:info@sei.ie)  
w [www.sei.ie](http://www.sei.ie)

# Contents

<b>Chairman's Statement</b>	2
<b>Chief Executive's Report</b>	3
<b>Members of the Board</b>	4
<b>Committees of the Board</b>	5
<b>Programmes of SEI</b>	6
<b>Programme Underpinning Functions</b>	19
<b>Energy Statistics</b>	20
<b>Administrative Report</b>	22
<b>Appendix 1 – A Selection of SEI Publications</b>	23
<b>Appendix 2 – Projects Funded in 2004</b>	24

# Chairman's Statement

2004 was an eventful one for our organisation and for the Irish energy sustainability agenda. The government's decision to decentralise the organisation to Dundalk poses the following challenge: our staff have shown tremendous skill and commitment in moving our agenda forward; how do we maintain and develop morale in the context of this location change?

We have addressed this at board level by authorising and supporting the executive to work with government with the intention of widening and deepening our portfolio, such that SEI will be an even more exciting and fulfilling space in which to work. The agenda that is emerging from this brief is still a work in progress, but it includes: the development of the Dundalk region as a prototype of best practice in energy sustainability; playing a central role in the evolution of mutually beneficial North-South policies and programmes; the strengthening of our research and development portfolio; and our location in a state of the art building that epitomises best practice in the use of energy, either as a retrofit or a new build. Important progress has been made in addressing this portfolio, in tandem with the more mundane but important issues associated with relocation. Improving performance in the sustainability of energy supply means increasing the share of energy supplied from renewable, indigenous and non-polluting sources. Improving performance in the sustainability of energy consumption means increasing the efficiency with which energy is used, such that the same energy services are delivered with less energy use. Both of these tasks require influencing the decisions of both suppliers and consumers such that their behaviour is more sustainable. We have a number of policy instruments with which to achieve this shift in behaviour. These include information; prices; regulation and standards; voluntary and negotiated agreements; and research and development.

If we can get all of these policy instruments working in tandem, in the direction of expanding supply of renewables and increasing the conservation of energy, we can quite quickly advance our sustainability mission. But this needs to be achieved in a manner that does not damage - and ideally enhances - our overall competitiveness. We are working with government, citizens and the private sector to provide the data and evidence that allows us to move forward on all of these fronts. As regards information, our Energy Policy Statistical Support Unit, based in Cork, provides a rolling series of analyses that both document the historical context, what our choices are and their implications. Both our educational programme and our web site - which also has all of our publications online - are evolving so that all of our citizens are empowered to understand and act.

As regards price signals, the good news is that in 2004 the EU Emissions Trading Scheme was approved - to commence in January 2005. For those sectors - heavy industry and electricity generation - that are included in the scheme, each installation is given an allocation, expressed in tonnes of CO<sub>2</sub> emitted per year. If the company emits more than this allocation, it must buy allowances in the European market place to 'cover' its emissions, or be subject to substantive penalties. Conversely, if it emits less than its allocation, it can sell the difference between its allotment and its emissions into the market. As I write this (30th March 2005), the price is €14.08 per tonne. This is a tremendous innovation, which we have strongly supported: for the first time, those involved know that they can make or save money by

reducing greenhouse gas emissions. And conversely, that lack of attention to carbon emitting activity could be very damaging. For the first time, greenhouse gas emissions are a direct commercial preoccupation.

It was proposed that there would also be a carbon tax, applied to those sectors not included in the trading scheme, with rebates for firms that achieved demanding energy efficiency targets. The government announced that it was not proceeding with this strand of policy. However, we have continued to make progress: our voluntary programme, whereby a number of star performing companies set in some cases very demanding voluntary targets and achieve them; our House of Tomorrow and Public Sector demonstration projects will provide a basis for revisiting regulatory standards and controls; and we have learned much from our experience with our embryonic RD&D programme that will prove invaluable as we move energy into the mainstream of the 'knowledge economy.'

We face into 2005 knowing that, up to now, we have been protected from most of the force of the rise in oil prices by the appreciating value of the Euro against the US dollar. This happy coincidence of events may not continue - serious price shocks could be on the way. We know also that government has indicated that it envisages spending in the order of €185 million in the 2008 - 2012 period to buy greenhouse gas allowances on the international market to make up the gap between our Kyoto commitments and our emissions. These pose a challenge and an opportunity: how can we be smart - reduce the damage to the economy of sharp price escalations and the payment to others to meet our Kyoto obligations - while advancing our renewables and efficiency agendas? SEI is determined to play its part in meeting this challenge and working with government, business and community interests, and - perhaps most importantly - our fellow citizens, in moving forward on these fronts.

On behalf of the board, I would like to express my gratitude to the executive and staff who have continued to deliver an expanding portfolio with energy and creativity, to a very high standard, and done so in an environment of some locational uncertainty. Also we have benefited greatly, often in subtle ways, from the support of the Minister and officials of the Department of Communications, Marine and Natural Resources - they advise, support and encourage, but do not constrain. Finally, I would like to thank my fellow board members, who continue to work hard, productively and unheralded on a variety of fronts. Their wisdom and support is much appreciated.

**Frank Convery**  
Chairman

# Chief Executive's Report

This report is of the second full year of SEI's activities as a statutory Authority. There was a step change in the volume of SEI outputs and several sustainable energy indicators showed positive trends. The expected carbon tax did not materialise, while relatively high and volatile energy prices characterised the year.

The environmental pillar of energy policy, which was dominant at the outset, was balanced at year-end by competitiveness and security of supply concerns. In this context SEI's mandate to promote and assist energy efficiency and renewables provided the basis for the ongoing delivery of a robust set of programmes designed to improve competitiveness, security of supply and the environmental impact of energy supply and end use.

The industry programme focuses on competitiveness. The 80 members of the Large Industry Energy Network (LIEN), who together account for 42.4% of the Industry sector's total primary energy requirement, reported an overall improvement in energy performance of 2%. Recognition for high achievers was provided through the Sustainable Energy Awards, which were sponsored by ESB Customer Supply. Martin O'Connor of Pfizer Little Island was named Energy Manager of the year. There were 17 other awards, including seven to LIEN members. The Energy Policy Statistical Support Unit undertook an important piece of analytical work in assessing the exposure of Irish industry to rising energy costs. Over 96% of the gross value added in industry is generated by enterprises whose energy costs are less than 4% of their direct costs. The combination of changing industrial structure, investment in new technology and the practice of energy management has brought about a situation whereby, between 1990 and 2003, industry value added grew by 228% whereas industrial final energy consumption increased by only 28%.

The deployment of renewable energy in electricity generation experienced a set back with the introduction of a three-month moratorium on wind connections to the national grid. The moratorium was imposed by the CER on the recommendation of the transmission system operator ESB National Grid. SEI's renewable energy programmes and research efforts were directed towards lifting the moratorium on wind, assessing the impact of the proposed new electricity market arrangements on wind and advancing the research and demonstration of a range of technologies for heat and power production. In keeping with its mission, SEI undertook and commissioned several pieces of public good research to inform the debate and help move the agenda forward. Key outputs included a draft consultation document on future support mechanisms for renewables, a short term action report for the Renewable Energy Development Group and two working group reports on bioenergy and CHP. The All-island dimension of renewable energy was captured at the Renewable Energy Summit at the Royal Hospital Kilmainham in October 2004. The clear message coming from the summit was that the scale of renewable energy deployment envisaged in the EU RES-E Directive is plausible and affordable.

The built environment still accounts for the bulk of energy use in Ireland and SEI has a number of programmes designed to address its efficient use. The Public Sector programme has assembled a broad portfolio of exemplary design, demonstration and energy management projects. Initial results from the energy management bureaux include one bureau reporting average

annual savings of 9%. The issue of persistent fuel poverty that affects up to 62,000 households is being addressed through the Low Income Housing programme. SEI believes that in the context of rising energy prices this programme needs to be accelerated in the interests of social inclusion. The House of Tomorrow programme has attracted significant developer interest. The programme has a good geographical spread and has achieved high levels of BMW region participation. A select number of developments are scheduled for inclusion in a North/South "Clever Homes" initiative. The EU Directive on the Energy Performance of Buildings comes into force in January 2006. SEI has provided the secretariat and technical support to an interdepartmental working group. I was pleased on behalf of SEI to commend a draft action plan to the Ministers responsible for the Environment and Energy.

SEI messages to consumers are competing with a wide range of marketing and promotional material. Successful alliances with retailers, radio and utilities have considerably amplified consumer messages. Rising oil and electricity prices have increased both consumer awareness and their propensity to act. SEI's educational programme continues to refresh and its integration into the school curriculum has contributed to its growing influence. Despite advances in technology, transport indicators show a failure to move towards sustainability.

The Energy Policy Statistical Support Unit continues to provide insights through statistics. Fuel switching, increased generation efficiency and investment in new electricity generation plant have seen CO<sub>2</sub> production per unit of electricity drop from 981g/kWh in 1990 to 651g/kWh in 2003. For the first time we have produced more with less energy and even less CO<sub>2</sub>. However these gains are brought at the price of higher dependence on imported gas and thus greater exposure to price volatility of this fuel source.

SEI was selected to move to Dundalk under the Government's decentralisation programme. SEI, in responding to government and stakeholders, has sought to emphasise the positive potential in such a move. Local stakeholders are being engaged in the development of a Dundalk 2020 vision to which Government is expected to lend support. The overall objective is to exemplify the integration of the National Spatial Strategy, regional and cross-border development, by creating an energy and innovation led model of sustainable development.

Finally, embedding sustainability is a significant challenge to the whole of Irish society. I would like to thank the board members, management team and staff of SEI for their continued efforts and commitment in strengthening the further development of sustainable energy in Ireland.

**David Taylor**  
Chief Executive

# Members of the Board

The first Board of SEI was appointed in 2002 under the provisions of the Sustainable Energy Act, 2002. It comprises a total of 12 members, including the Chief Executive. There were no changes to the Board in 2004. The members of the Board as of 31 December 2004 are as follows:



**Frank Convery** is the Chairman of SEI and Heritage Trust Professor of Environmental Studies, University College, Dublin. He was previously Research Professor at the Economic and Social Research Institute, Dublin, and Associate Professor of Natural Resource Economics at Duke University North Carolina.



**John McMullan** is the Executive Director of the Northern Ireland charity Bryson House, which is at the forefront of energy efficiency policy development in Northern Ireland. He is also Chairman of the University of Ulster's Visiting Panel on Sustainable Development; Chairman of the Northern Ireland Fuel Poverty Forum; Vice-Chairman of the Belfast Healthy Cities project, and a member of the UK Landfill Tax Credit Forum.



**John Buckley** is a property developer, auctioneer and surveyor, with 25 years business experience. He is a Board member of John Buckley Auctioneers, Killarney Race Company and the Advisory Committee of the Environmental Protection Agency.



**David Naughton** is the National Industrial Officer with the Technical, Engineering and Electrical Union, where his remit covers responsibility for the ESB and the National Joint Industrial Council for the Electrical Contracting Industry.



**Gerry Cahill** is Managing Director of Gerry Cahill Architects and Co-Director of Urban Projects Ltd. He has been involved since the 1980s in the design of urban renewal and social housing projects in Dublin city and county. Prior to joining the Board of SEI he was a Director of Energy Action Ltd. He has taught design and technology at the UCD School of Architecture since 1979.



**Michael Nicholson** is Director of Environmental Services with Wicklow County Council. He previously worked with Meath and Leitrim County Councils, Cork Corporation, and with Trim and Arklow town councils. He was also previously a Director of the Mid-East Regional Authority. He has a keen interest in environmental matters, in particular sustainable development.



**Martin Finucane** is Principal Officer in the Sustainable Energy Division of the Department of Communications, Marine and Natural Resources where among his responsibilities are climate change issues in the energy sector, the promotion of renewable energy and end-use energy efficiency policy. He previously worked in the social welfare area of the public service.



**Claire O'Connor** is the Director of the National Disability Authority. She is a Director of West LB Covered Bond Bank and, for 12 years, was a Director of ICC Bank and Chair of the ICC Audit Committee. She is a former CEO of the American Chamber of Commerce Ireland and was previously Head of Corporate Finance at Irish Life Plc.



**Bill Flood** is a safety and environmental consultant, and was previously Manager of Irish Fertiliser Industries in Arklow. He has considerable experience of energy-intensive process manufacturing, and has a special interest in performance auditing, benchmarking and negotiated agreements.



**Pat O'Malley** is a civil engineer with extensive experience in property development and project management. He has also served as a Special Adviser to the Minister for Energy (1989/1992) and is a former Opposition spokesperson for Energy, Transport, and Communications (Dáil Éireann 1987/1989).



**Vicky Heslop** has been involved in promoting sustainable development since 1986. She has been the Managing Director of Methan O Gen Ltd, a specialist biogas consultancy and development company, since 1994. She is Vice-President and a founder member of the Irish Bioenergy Association.



**David Taylor** is Chief Executive of SEI. Prior to his appointment, he was the Director of the Irish Energy Centre. He qualified as a Chemical Engineer and holds an MSc in Management from Trinity College Dublin. He is active in European energy matters and is a member of the IEA Committee on Energy Research and Technology.

# Committees of the Board

## COMMITTEES OF THE BOARD

Much of the detailed work of the Board is initially undertaken by either a Committee or Working Group. The Committees and Working Groups are comprised of members of the Board, SEI Management, and external experts.

There are two committees and one working group of the Board.

### Board Committees

The **Remuneration Committee** is responsible for:

- Recommending to the Board the terms and conditions upon which the Chief Executive shall hold office
- Establishing appropriate performance indicators in the context of the Chief Executive's Performance Related Bonus
- Recommending to the Board the payment of the Chief Executive's Performance Related Bonus
- Reviewing the Authority's Action Plan in respect of the Sustaining Progress agreement.

The composition of the committee, at 31 December 2004, was as follows:

- Frank Convery (Chair)
- Martin Finucane
- Bill Flood
- David Naughton

The **Audit Committee** is responsible for:

- Reviewing the Annual Financial Statements and other published statements and information as related to governance and financial issues on behalf of the Board
- Ensuring there are no restrictions on the scope of the audit and reviewing the activities, findings, conclusions and recommendations of the auditor
- Reviewing the manner in which management ensures there is an adequate and effective system of internal financial, operational and compliance controls
- Approving and reviewing the planned work programme of the Internal Auditor

The composition of the committee, at 31 December 2004, was as follows:

- Pat O'Malley (Chair)
- Michael Nicholson
- Claire O'Connor

The **Policies & Procedures Working Group** is a fixed duration working group of the Board of Sustainable Energy Ireland and consists of two strands, a policy strand and a procedures strand.

The Energy Policy strand provides advice to SEI on the development of energy policy, programme and performance evaluation on behalf of the Board.

Its composition, at 31 December 2004, was as follows:

- Vicky Heslop (Chair)
- Gerry Cahill
- Martin Finucane
- David Taylor

The **Organisational Processes and Procedures strand** provides advice to SEI on:

- Organisational process areas, and aspects of process and procedure not covered by the Audit Committee, on behalf of the Board.
- Aspects of process and procedure including accommodation, governance, HR policies, external communication, customer service, the grant process and delegation of powers, knowledge management, risk management, and legislative compliance.

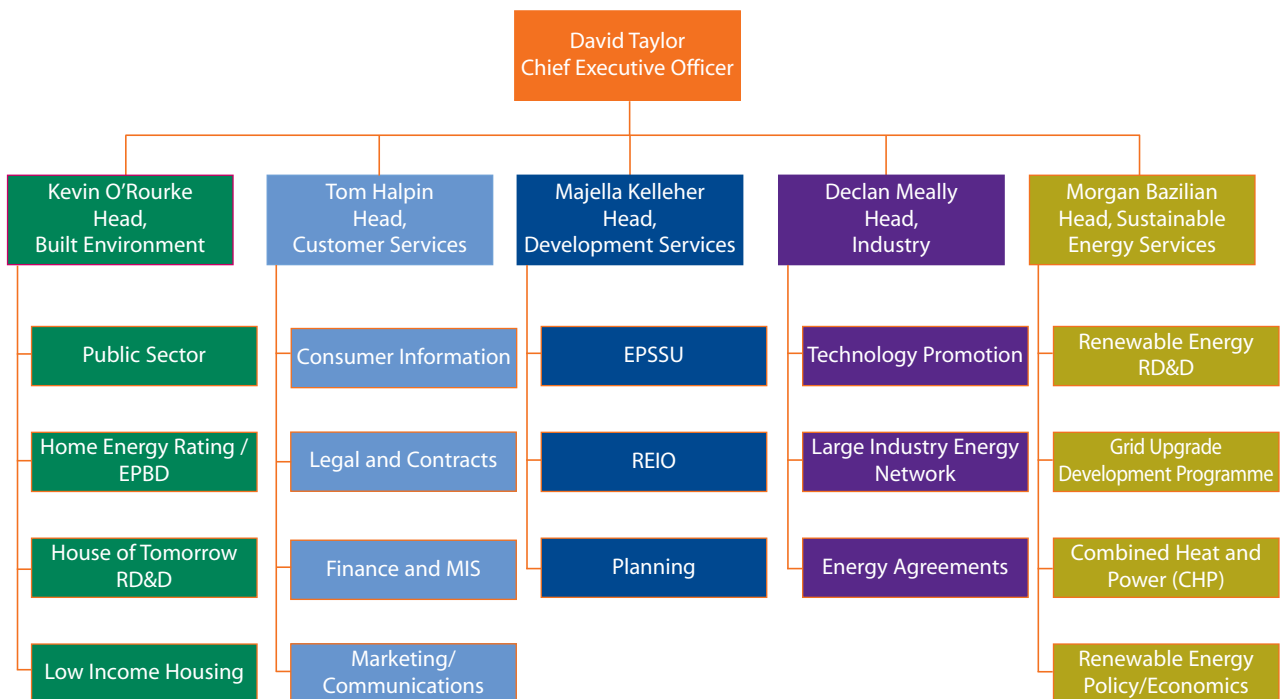
Its composition, at 31 December 2004, was as follows:

- John Mc Mullan (Chair)
- John Buckley
- Bill Flood
- David Taylor

# Programmes of SEI

SEI is charged with delivering programmes to enable energy efficiency and the development of renewable energy. It is organised into five departments, all of which implement these programmes.

A full list of programmes, broken down by department, is outlined below:





# Home Energy Rating / Energy Performance of Buildings Directive

The energy efficiency of a home is rarely visible to vendors, buyers or tenants. This programme will address the need for a comprehensive, nationally recognised, home energy rating system aimed at making energy efficiency an explicit and important factor in house purchase and renovation decisions.

It is also designed to stimulate householders and investors to systematically identify the most effective means of improving the energy performance of their homes.

A primary focus of the programme is to prepare for and enable the successful implementation of the EU Energy Performance of Buildings Directive (EPBD).

2004 expenditure: €0.03 million

## 2004 Achievements

In 2004, SEI commissioned a number of strategic studies to inform the proposed implementation of the Directive. The areas covered were:

- > Surveying and calculation software systems
- > Administration and management software systems
- > The fulfilment of obligations in relation to boiler/heating system efficiency

During 2004, the SEI team delivered a significant number of public presentations aimed at increasing awareness of the EPBD and its implications. Presentations were made to Dublin City Council, South Dublin County Council, EuroACE, the Office of Public Works, and CIBSE among others.

On behalf of the Working Group established to implement the Directive, SEI played an active role in a large number of national and international meetings, which were convened to discuss the EPBD. These included the European Commission convened Energy Demand Management Committee.

SEI continues to participate in a Concerted Action project on the EPBD, within the EU Intelligent Energy for Europe programme. Currently, 23 Member States are participating in the project, which provides an important forum for the exchange of ideas and information relating to the implementation of the Directive.

## EU ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

### Background

Across the EU, buildings in residential and non-residential sectors account for over 40% of all energy-related CO<sub>2</sub> emissions. Research indicates that these emissions could be reduced by over 20% through improved technologies and practices. The EU Energy Performance of Buildings Directive (EPBD) is a major policy response to this challenge and contains a range of provisions aimed at improving energy performance in residential and non-residential buildings, both new and existing.

Under the Directive, the owner must provide an energy rating certificate (or label) when buildings are built, sold or rented. In Ireland, this is expected to impact on over 150,000 transactions annually in the residential sector alone.

The energy rating is to be accompanied by recommendations on cost-effective improvements. The EPBD also requires that steps be taken to improve the efficiency of boilers and air-conditioning systems.

### Action plan

A Working Group was established in 2003 to oversee and plan the implementation of the EPBD in Ireland. The Group comprises senior officials from the Department of the Environment, Heritage and Local Government (DEHLG), the Department of Communications, Marine and Natural Resources (DCMNR), and Sustainable Energy Ireland (SEI).

The Group has prepared a Draft Action Plan, which sets out the proposed national arrangements, development tasks, responsibilities and timescales that will be required in order to achieve full implementation of the EPBD in a workable and cost-effective manner.

SEI has taken a lead role in preparing the Plan, which will be published as part of a public consultation process. A revised action plan, taking account of the comments received from interested parties, will be published in 2005.

SEI is playing a key role in supporting and funding the development of practical measures required for the implementation of the EPBD including a national database, administration, software, training, quality assurance and promotion.



# House of Tomorrow R&D

The residential sector accounts for 25% of all energy-related CO<sub>2</sub> emissions in Ireland. This programme aims to accelerate improved energy performance in both existing and new-build Irish housing stock.

Programme elements include:

- > Public good research
- > Model demonstration projects
- > R&D of products, systems and services

2004 expenditure: €0.99 million

## 2004 Achievements

In addition to ongoing programme work, 28 projects in the areas of research and development, international collaboration, and public good research were approved for funding support. This represents a total of €5 million in new funding commitments. Highlights for 2004 included the approval of 22 new demonstration projects comprising 1,183 homes demonstrating innovative or best practice technologies and design strategies.

SEI's SEBNet programme was created and launched, which has since attracted membership from 37 leading Irish product suppliers. The programme specifically promotes the uptake of energy efficient products and systems by specifiers and consumers. Associated with this was the commissioning of a directory of energy efficient products that meet established quality standards.

A pilot survey of Irish housing stock was commissioned. Its aim was to assess the actual energy performance of the housing stock and to assist in the development of a survey methodology designed to support the implementation of the Energy Performance of Buildings Directive. A technical and market study of hot water heating system options in Irish housing was also commissioned.

A training initiative aimed at the Irish domestic heating industry, and designed to promote quality standards and energy efficiency was launched. (See case study)

The sustainable energy technologies employed in the 1670 housing demonstration projects approved to the end of 2004 include:

- > Condensing boilers (1,153 homes)
- > Solar water heating (300 homes)
- > Heat recovery ventilation (176 homes)
- > Ground source heat pumps (128 homes)
- > Wood pellet boilers (50 homes)

## A NEW INITIATIVE TO PROMOTE QUALITY STANDARDS AND ENERGY EFFICIENCY IN THE IRISH DOMESTIC HEATING INDUSTRY

SEI launched a new training initiative in 2004 to promote quality standards and greater energy efficiency in the Irish domestic heating industry. The initiative is aimed at the Irish domestic heating industry and designed to support the development of certified installer and service technician schemes.

At present, there are few resources available to help consumers and specifiers identify quality heating system installers. As a consequence, consumers face difficulties in making important purchase decisions, while at the same time professional installers face difficulties in selling best practice systems.

In its capacity as the national energy authority, SEI is supporting the development of industry-led training standards and codes of practice for heating system installers. Under the new initiative, one of the first schemes will involve the provision of funding for the training of oil-fired heating system technicians in accordance with an accredited training scheme managed by the Oil Firing Technical Association (OFTEC). Funding opportunities will be open to all Irish-based institutions with training capability, including those that are involved in the education and training sector, in private industry, and/or in joint ventures between the two parties.

The new quality initiative forms part of SEI's SEBNet programme (the Sustainable Energy Buildings Network), which promotes the uptake of energy efficient practices in buildings.



## Low Income Housing

It is estimated that persistent fuel poverty is a feature in 62,000 households in Ireland, and that it affects up to 227,000 households intermittently. This programme plays a pivotal role in establishing and implementing a national plan of action to address fuel poverty in low income households.

This programme plays a pivotal role in establishing and implementing a national plan of action to address fuel poverty in low income households.

Programme elements include:

- > Installing energy efficiency services in homes occupied by low income householders
- > Increasing the capacity of organisations in Ireland to deliver such services
- > Supporting this action through targeted information and awareness raising, and through partnership building at local, regional and national levels

2004 expenditure: €0.94 million

### 2004 Achievements

By December 2004, energy efficiency improvements had been carried out in 6,815 homes.

In January 2004, SEI launched "A review of fuel poverty and low income housing" at a seminar attended by a number of stakeholders including Government Departments and agencies, as well as community and voluntary sector representatives.

During the summer of 2004, SEI appointed two contractors to manage the operation of the Fund Disbursement programme, which delivers the installation of energy efficiency measures in low income households. The Fund Disbursement programme was also rebranded the Warmer Homes Scheme.

Two further community-based installer agencies, in Wexford and in Inishowen, Co. Donegal, were approved for funding. This brings the total number of installer agencies operating under the scheme to eight: two in Co Dublin; one each respectively in Cork city, Limerick city, Tralee and Wexford, and two in Donegal.

Towards the end of 2004, SEI initiated a pilot project through which a model for the engagement of private sector installation contractors will be established. Further expansion of the Warmer Homes Scheme is planned for 2005, with a continued focus on funding community-based installers.

### MEITHEAL FORBARTHA NA GAELTACHTA TEO (MFG)

MFG, a community development company based in the Donegal Gaeltacht, was established in 1990 to deliver the Leader 1 programme in Gaeltacht areas nationwide. In 1996, MFG was contracted to develop the Local Development Social Inclusion programme, a key objective of which was to reduce poverty levels in designated local areas.

In Autumn 2003, MFG applied for funding under the rebranded "SEI Warmer Homes Scheme" to help it establish an insulation service for low income households in the Donegal Gaeltacht. Under a three-year agreement, SEI is providing funding support of €50,000 per annum. MFG is providing the project co-ordinator and FÁS is providing staff funding through its Jobs Initiative and Community Employment scheme, as well as providing funding for staff training.

MFG began operations in February 2004 and is now providing attic insulation, draught proofing, hot water cylinder jackets, low-energy lamps and energy advice to low income households in rural communities in the Donegal Gaeltacht. A small charge is levied for the service, which may be waived if necessary.

During 2004, MFG improved the energy efficiency in more than 100 homes. The project is providing employment and training for three people, all of whom were previously long-term unemployed. During its first year of operation, MFG has managed to combine good productivity with high quality workmanship.

Despite relatively little investment in publicising the service, it has proved extremely popular and MFG now has a long waiting list. During 2005, the company plans to carry out work in more than 100 homes on behalf of SEI, including some homes on islands off the coast of Donegal.



## Public Sector

The Green Paper on Sustainable Energy proposed that the public sector should be an exemplar in the implementation of energy efficiency best practice. This programme facilitates significant energy efficiency improvements in public sector buildings.

This SEI programme facilitates the delivery of significant energy efficiency improvements in the design and specification of new-build and refurbishment construction for which approximately €1.9 billion has been allocated under the National Development Plan.

Programme elements include:

- > Design studies, aimed at highlighting new opportunities for energy efficient solutions in refurbishment and construction projects.
- > Model solutions, aimed at supporting new investment in more energy efficient solutions
- > Energy management bureau operations, designed to encourage the provision of contracted energy control and management for public sector buildings

2004 expenditure: €1.99 million

### 2004 Achievements

Following a review of the portfolio of projects supported, as well as a review of the programme budget, it was decided to close both the Design Study Support Scheme (to individual applications) and the Model Solutions Investment Support Scheme. However, the former scheme remains open for applications of a generic nature. In the period up to 2004, 75 design studies and 49 model solutions studies were completed. These are now fully operational as demonstration projects in public buildings.

Work is in progress on: a pilot evaluation of ten completed model solutions, the development of energy performance indicators for buildings in Ireland, an assessment of low carbon technologies for the tertiary sector and the production of a building energy management guidebook.

Two bureaux are now fully operational. The Office of Public Works bureau covers more than 150 of the largest buildings in the central government's office estate. 'e3', incorporating UCD, Trinity College Dublin, Dublin Institute of Technology and Dublin City University, was officially launched in May 2004 (see Case Study). Already, the colleges are benefiting from reductions in energy consumption and costs as a result of bureau interventions.

SEI has approved an application submitted by the Department of Health and Children for a bureau incorporating the five Dublin teaching hospitals. These are some of the largest users of energy in the Irish health sector.

### e3 – THIRD LEVEL COLLEGES ENERGY MANAGEMENT BUREAU

Four Dublin-based colleges, the Dublin Institute of Technology, Trinity College Dublin, Dublin City University, and University College Dublin, have joined forces to form 'e3' – the Third Level College Energy Management Bureau – in an effort to reduce the colleges' annual energy consumption. Support for the bureau, which was officially launched in May 2004, was provided by two SEI public sector programme schemes. The Model Solution Investment Support Scheme funded the implementation of the enabling internet-based building energy monitoring and targeting system, while the bureau itself was funded under the Energy Management Bureaux Scheme.

Under the direction of the bureau, a series of energy audits have been carried out across each university campus. The audits set out to identify how energy was being consumed in each building; what energy saving measures might be implemented; and what targets might be set for future performance. The audits showed that there is considerable scope for the improvement of existing housekeeping practices. The process also identified the range of energy savings that could accrue from the installation of new technologies, plants or controls. This has resulted in some of the colleges investing in measures such as improved lighting and controls.

The findings of these and other audits are disseminated by the bureau through training programmes and at focus meetings for key staff at the four colleges. In addition, on-site energy awareness issues are promoted to a wider audience through the dissemination of posters, stickers and calling cards.

The bureau's goal is to achieve a 10% reduction in energy use in 30 key buildings over a three-year period. Energy savings for the end of the third year are projected at more than €315,000 annually. This will result in a reduction of 3,230 tonnes in CO<sub>2</sub> emissions.



# Consumer Information

The aim of the Consumer Information Programme is to encourage consumers to become active members of a sustainable energy society by modifying attitudes, values and beliefs. The programme targets householders and also children who will be the energy consumers of the future.

While, the sector is characterised by moderately high levels of awareness of basic energy efficiency measures, consumers generally are not very aware either of the environmental impacts of energy-related activities, or of Ireland's international obligations under the Kyoto Agreement and various EU Directives. Moreover, while consumers may indicate willingness and a desire to become more energy efficient, these sentiments are rarely matched by appropriate follow-up action.

SEI's Consumer Information programme aims to create greater levels of awareness and action aimed at promoting more sustainable energy-consumption-related behaviour. Elements of the programme include:

- > Energy Awareness Week
- > The dissemination of information and advice via print materials, a telephone hotline, exhibitions and the Internet
- > Consumer behaviour activities
- > Schools initiatives aimed at influencing the early formation of positive long-term behaviours and attitudes

2004 expenditure: €0.7 million

## 2004 Achievements

Energy Awareness Week is a key initiative aimed at reaching householders in particular. The theme for the 2004 programme was 'sustainable heat', with consumers exhorted to turn down heating thermostats by one degree, a measure that could yield a saving of 10% on heating bills.

SEI also had a stand at the Spring Homes and Garden Show, which took place at the RDS in March 2004.

20 towns and cities throughout Ireland took part in National Car Free Day, which took place on 22nd September 2004. An associated competition for primary schools, the first of its kind organised by SEI, saw a significant numbers of schools participating in the event.

2004 also witnessed the prototype development of a 'White Site' website, which will allow consumers to window shop for energy efficient appliances online, and compare product features and prices. The site will be completed during 2005.

The schools programme focused more on younger age groups with the development of the Guzzler workbook, which targets 5 – 7 year olds (see Case Study).

## GUZZLER RESOURCES FOR PRIMARY SCHOOLS

### Background

With the introduction of the new Science Curriculum for primary schools in 2003, science became a mandatory subject for pupils of all ages. In response to this, SEI developed new resources aimed at the junior level of primary schools. After consultation with a number of teachers, the Guzzler character and resources were devised and distributed to schools nationwide.

### Guzzler books

Arising from discussions with teachers and pupils it became evident that the big book format was very effective at this level. "Guzzler's Big Book on Energy", an A3, full colour, story book was developed. Guzzler, the central character in the book is a friendly monster who uses too much energy. Throughout the story, Guzzler's owner, a young girl called Aoife, teaches him about ways of saving energy. "Guzzler Investigates Energy" is an accompanying workbook which complements the story book. Full of interactive activities, the book is ideal for using in the classroom with pupils of infant, 1st and 2nd classes.

In September 2004 a promotional leaflet was sent to all primary schools informing them about the Guzzler resources, available free of charge. To date, over 1300 book have been distributed to primary schools. Informal research indicates that the book is very popular with both teachers and pupils.

### Guzzler workshops

An interactive workshop was also developed as part of this suite of resources. Expert science facilitators guide pupils through this hands-on workshop and with the help of a large puppet, Guzzler comes to life for the pupils. Workshops commenced early in 2005 and will continue throughout the academic year at schools who have already received the Guzzler books.



# Renewable Energy Information Office

SEI's Renewable Energy Information Office (REIO), which is based in Bandon, Co Cork, was established to promote the use of renewable energy resources and provide independent advice and information nationwide on financial, social and technical issues relating to renewable energy development across the domestic and commercial sectors.

The REIO team stimulates the increased use of energy from renewable sources such as wind, solar, biomass, geothermal and hydropower by:

- > Publishing and disseminating a range of newsletters (including the bi-annual Planning and Energy Update) together with a range of targeted technology information materials
- > Maintaining a database of all relevant parties who have a key role to play in the further growth of the renewable energy industry in Ireland
- > Organising conferences, workshops and information meetings to address topical issues including barriers to the development of the renewable energy industry
- > Providing an advice service for local authority planners and decision makers

2004 expenditure: €0.68 million

## 2004 Achievements

As of December 2004, there were 46 wind farms with 340 MW installed and around 200 MW under construction; 15 MW landfill gas installed and 1.8 MW wood CHP constructed.

A 'wind pack' comprising updated and improved materials for the energy industry, financiers and policy makers was developed. Other new publications included a buyer's guides for the residential market.

REIO worked closely with the Department of the Environment and Local Government on the revision of new wind planning guidelines for local authorities.

In terms of external engagement, REIO hosted three national conferences and study tours, and participated in a range of trade shows including the Spring Homes and Garden Show, The Energy Show, The Self-Build Show, Plan Expo, The Irish Water and Environment Show and The Irish Wind Energy Association annual conference.

REIO also organised targeted information events and study tours to support the market development of wind, solar and biomass projects, as well as three one-day exhibitions in Tralee, Galway and Kells during Energy Awareness Week.

The call centre processed more than 8,000 enquiries.

## WOOD ENERGY 2004

Ireland has the potential to develop an indigenous fuel supply derived from forestry and wood industry waste. This resource could be exploited for domestic, industrial and export markets. Refined fuels such as wood chips, pellets and briquettes (processed sawdust) offer many advantages, as they are both compact and clean, are easy to store, and have a very high energy content.

This was among a range of issues discussed at a conference organised by the SEI Renewable Energy Information Office in conjunction with COFORD. The conference, which took place in Cork and was entitled 'Wood Energy 2004', was attended by more than 100 delegates, including Mr John Browne TD, Minister of State at the Department of Agriculture and Food.

During the two-day event, leading technology experts from Austria, Germany, Sweden, America and Ireland shared their expertise and experience in developing various wood fuel projects.

Other topics addressed during the conference included an appraisal of some of the business opportunities available for developing wood fuel projects; an overview of successful Government support policies in other jurisdictions; a review of new technology developments in the areas of wood pellet production, pellet distribution, wood heating and combined heat and power (CHP); and an account of success stories from Austria and the USA.

Pearse Buckley of SEI presented the findings of the Bioenergy Strategy Group on the current status of available and practicable wood energy resources in Ireland. In his presentation, Conor Casey of Casey Technologies described the potential that wood heating technologies could offer to the industrial and commercial sectors in Ireland.

Tim Cowhig of Independent Biomass Systems, a joint venture between Graingers Sawmill and SWS Group, gave a presentation on his company's experience of developing Ireland's first biomass CHP plant, (a project that was supported by SEI's RE RD&D programme). The biomass CHP plant has the capacity to generate 3.5MW heat for the sawmill and 1.8 MW electricity for export to the national grid. The conference concluded with a site visit to the plant, which is located in Enniskeane, Co Cork.



## Large Industry Energy Network (LIEN)

The Large Industry Energy Network (LIEN) is a voluntary networking initiative comprising 80 of the largest industrial energy users in Ireland. These companies are committed to reducing their energy usage on an individual basis and recognise the benefits of collaborating with like-minded organisations.

Members also recognise that a structured approach to energy auditing and management, (coupled with the annual statement of energy accounts that is a condition of Network membership), are valuable tools for driving energy efficiency.

The main elements of the LIEN programme are:

- > Reporting energy performance progress and setting realistic targets
- > Sharing information and experience to achieve best practice. This is implemented through workshops; a LIEN members' web site; networking events; the delivery of courses; and the dissemination of case study information
- > Improving competitiveness by reducing energy costs
- > Helping companies to meet their environmental and regulatory requirements

2004 expenditure: €0.1 million

### 2004 Achievements

LIEN membership accounts for 42.4% of industrial primary energy requirements and almost 9.4% of national primary energy requirements.

The LIEN membership increased to 80 companies, which have a combined annual energy spend of approximately €300 million. Two companies left the Network in 2004 and three new companies joined.

Mr Noel Dempsey TD, Minister for Communications, Marine and Natural Resources in December 2004, launched the 2003 LIEN annual report. The report concluded that members saved approximately 123.6 GWh during the year, with a consequential reduction of nearly 43,419 tonnes of CO<sub>2</sub>.

Five workshops and seminars were organised for members during the course of year. Three newsletters were published.

SEI plans to continue developing the network and several major companies have shown an interest in joining.

### ENERGY PRICING AND TRENDS WORKSHOP, KILKENNY

Each year, Large Industry Energy Network (LIEN) workshops are held in various locations around Ireland. At these workshops, network members can access best practice information on technical and strategic issues, which in turn may help them to maximize on-site energy saving opportunities.

In August 2004, LIEN members attended a workshop where, among other issues, the range of factors likely to impact on future energy prices was discussed.

As a result of increasingly volatile energy prices in Ireland, coupled with uncertainty surrounding international energy markets, a clear understanding of the dynamics of energy pricing is extremely important. At the August workshop, LIEN member companies had the opportunity to listen to the expert opinions of economists, consultants and suppliers. This information has enabled them to make informed decisions in relation to budget and priority setting for the year ahead. The event also gave energy managers an opportunity to network with other like-minded professionals and discuss various energy-related projects and other issues.

The timing of the event coincided with an announcement by the Commissioner for Energy Regulation of details relating to electricity price increases. Also around this time, the ESB launched details of its amended Winter Peak Demand Reduction Scheme and the workshop featured a presentation by ESB National Grid explaining the differences.

The workshop, which was held in Kilkenny, attracted a large attendance, including representatives from over thirty LIEN member companies.

# Technology Promotion

Rising fuels costs and the opening of the energy market have increased awareness among Irish companies of energy costs. This programme helps firms to adopt best practice energy saving solutions and thus enable them to make a bottom line impact by reducing their fuel and electricity costs.

Companies which make energy efficiency, and the protection and conservation of the environment, core elements of their management practice may mitigate the effects of rising energy costs, which may in turn help them to create a sustainable competitive advantage for their business. Moreover, companies can benefit from the application of energy efficient technologies and techniques thus reducing their energy usage and related costs.

This programme concentrates on the promotion of proven energy efficiency improvement measures that create considerable reductions in both energy usage and related costs. Energy-saving initiatives may include the carrying out of energy audits, the design and development of energy management systems, and the implementation of on-site energy awareness raising campaigns aimed at employees.

Among a range of activities, the Technology Promotion programme promotes the uptake of best practice techniques and technologies by industry, and it encourages and supports energy research as well as research, development and demonstration (RD&D).

2004 expenditure: €0.1 million

## 2004 Achievements

2004 marked the first year of the Sustainable Energy Awards for which 250 nominations were received (see Case Study). A total of 18 awards in seven categories were presented at a gala dinner held in the Conrad Hotel Dublin in November 2004.

The theme of the 2004 Energy Show held on 12th and 13th May 2004 in the RDS, Dublin was 'towards a low-carbon economy'. This event provided an opportunity for suppliers and customers of sustainable energy technologies and services to meet, share views, transact business and make a low carbon economy an integral part of their day-to-day business operations.

Training courses on energy management and boiler house management were offered during the year. This was in addition to the eight energy efficiency and renewable energy workshops at the Energy Show.

## SUSTAINABLE ENERGY AWARDS

Organised by SEI, and sponsored by ESB Customer Supply, the Sustainable Energy Awards were created to encourage, recognise and reward excellence in energy management in the industrial, commercial and public sectors, and provide an opportunity for all organisations, irrespective of their size, to gain public recognition for their achievements in reducing energy usage and energy-related CO<sub>2</sub> emissions.

2004 marked the first year of the award scheme. The presentation ceremony took place in Dublin in November before an audience of 200 of Ireland's most senior energy managers and energy industry professionals.

The recipient of the Energy Manager of the Year Award was Martin O'Connor, Pfizer Ireland Pharmaceuticals, Little Island, Cork. Among the reasons cited for this award recognition were his outstanding commitment to energy management; his dedication to continuous professional development; and his commitment to leading an effective energy management team.

The award for overall winner in the Coordinated Energy Management Programme went to Aughinish Alumina Ltd, in recognition of its achievement of the very highest standards of energy management. (See Energy Agreement case study)

SEI plans to expand the Sustainable Energy Awards scheme in 2005.



# Energy Agreements

In September 2004, the Government announced that it would not introduce carbon taxation. Against this background, SEI is partnering with IBEC to develop a new energy agreement.

As a result of the introduction of the EU Emissions Trading Scheme, businesses are facing higher electricity costs. This factor, coupled with price volatility in international energy markets, is generating increased economic pressures for business.

Improved energy efficiency and better use of renewable energy sources can assist in reducing the economic risks associated with energy market volatility and related issues.

Based on the results of the Negotiated Agreements pilot project, SEI believes that an opportunity exists to formalise energy efficiency targets, based on a partnership approach to improving energy management in industry and in the wider economy. Against this background, SEI, in partnership with IBEC, is developing a new energy cost control initiative. Core elements of the new agreement will be the focus on advanced energy management practices, coupled with a significant reduction in the compliance burden previously associated with negotiated agreements. Participation in the Energy Agreement – and in particular the development of effective energy management within companies – will ensure that potential energy and emissions savings are realised and that economic progress is sustained.

2004 expenditure: €0.49 million

## 2004 Achievements

One of the key programme highlights was the establishment of a new agreements structure in light of the Government's announcement that it would not introduce carbon taxation.

SEI has developed electrical and thermal modules that will help companies to identify energy-saving opportunities within the Energy Agreements structure. In addition, two energy management products are in the process of being developed. The first, the 'Energy Management Action Programme' (EMAP), will provide a practical roadmap for any business that wishes to manage energy sustainably. In addition, SEI and the National Standards Authority of Ireland (NSAI) are in the process of developing an Irish Energy Management Standard.

## NEGOTIATED AGREEMENTS – FROM PILOT TO IMPLEMENTATION

Aughinish Alumina Ltd (AAL) participated in SEI Negotiated Agreements pilot project in 2002.

During the energy audit that was carried out as part of this pilot project, opportunities for generating energy savings across a range of utilities and process-related activities were identified. Overall, the number of opportunities for generating savings was considered significant, with the area of heat recovery singled out for particular attention.

As part of a subsequent agreement negotiated in 2003, AAL made a commitment to:

- > establish an accredited energy management system
- > appoint a dedicated energy co-ordinator
- > implement various heat recovery projects.

In October 2004, AAL received accreditation to the Danish Standard 2403 Energy Management System thus making it the first company in Ireland to become accredited to this internationally recognised energy management standard. In recognition of its commitment to energy management, AAL won the 2004 Co-ordinated Energy Management Programme Award at the Sustainable Energy Awards ceremony held in Dublin in November 2004.

AAL will implement the next phase of its energy management programme in 2005, a period which will also see a range of additional benefits accruing as a result of its operation of the Danish energy management standard.



# Combined Heat and Power (CHP)

Combined Heat and Power (CHP) is the simultaneous generation of usable heat and electricity in a single process. The CHP programme aims to create a better awareness of the benefits of CHP and ultimately stimulate the uptake of the technology.

SEI's CHP programme strategy incorporates aspects such as the evaluation of district heating potential; feasibility studies/pilot plants for innovative CHP projects; an awareness programme; support for the formation of the Irish CHP Association; recommendations for the regulatory and legislative treatment of CHP, and an appraisal of future support mechanisms which are designed to assist the Government in the development of a CHP policy.

The programme aims to build greater awareness of the impacts and benefits of CHP technology, leading ultimately to an increased willingness on the part of financiers to support CHP projects.

2004 expenditure: €0.13 million

## 2004 Achievements

The CHP Policy Group formed in March 2004. In order to help the Policy Group make informed recommendations, SEI commissioned the following:

- > A summary report on projected characteristics of new 'prime mover' technologies for CHP
- > An evaluation of existing legislation and regulation affecting new technologies in Ireland
- > An international benchmarking report
- > A report on Irish supply chain capability for CHP applications.

SEI has also taken action to create awareness for CHP in Ireland and has funded the development of promotional tools including a guide to CHP technology, its advantages and relevant applications; an interactive online facility designed to facilitate site-specific evaluation of CHP as an energy saving solution.

Two feasibility studies were supported in 2004: these will be completed in 2005.

Six CHP projects were approved under the SEI Renewable Energy RD&D programme. A further three biomass CHP projects with a total installed capacity of 26.8 MW were approved under the AER VI scheme.

## CHP POLICY GROUP PROPOSAL FOR THE IMPLEMENTATION OF A NATIONAL POLICY ON CHP

The Irish Government recognises that increased utilisation of combined heat and power (CHP) technology would increase energy efficiency and could make a significant contribution to the reduction of greenhouse gas emissions. Against this background, in March 2004, the Department of Communications, Marine and Natural Resources established the CHP Policy Group with a view to examining the potential for greater exploitation of this technology in the Irish market, and also with a view to developing suitable proposals for the implementation of a national policy on CHP in Ireland. As part of its support for the Policy Group, SEI provides both the Chair and the Secretariat.

### Objectives

The primary objective of the CHP Policy Group is to consider in the context of the EU Directive on Cogeneration and other relevant policy initiatives/directives:

- > The most ideal environments in which CHP plants should be installed, in order to maximise potential energy efficiencies
- > The policy options and support mechanisms available to Government to stimulate increased and appropriate use of CHP
- > Specific recommendations for actions that would increase the penetration of CHP at appropriate locations/installations in Ireland
- > Suggestions for the implementation of a national policy on CHP, based on staged, achievable targets

### Members

The Department of Communications, Marine and Natural Resources led group comprises representatives from industrial developers and users, Irish CHP Association, IBEC, the EPA, Department of the Environment and Local Government, the Commission for Energy Regulation (CER), utilities companies, relevant consultants, academics and representatives from SEI.

The Group invites inputs from suppliers, industry, local authorities and other agencies when appropriate.

### Report

The Group issued a draft interim report in December 2004. The final report, which is due in 2005, will include inputs from a wide range of interested parties, and will provide a roadmap for the implementation of Government policy and action on CHP-related issues.



# Grid Upgrade Development Programme

At present Ireland's electricity grid is unsuitable for the connection of large numbers of small and medium renewable energy generators and CHP generators. This programme aims to address these grid constraints, enabling the growth of the renewable electricity sector in Ireland.

The removal of barriers that are preventing the deployment of these technologies will help to stimulate the growth of the Irish renewable electricity sector.

The main objectives of the Grid Upgrade Development Programme (GUDP) are: to remove the strong disincentives associated with being the first renewable energy project in an area with poor electricity infrastructure; to optimise the electrical infrastructure available in that area; and to reduce planning difficulties.

The Department of Communications, Marine and Natural Resources is responsible for the implementation of the programme; SEI assists, where possible, in its implementation.

Programme elements include:

- > Developing a focused grid infrastructure extension and reinforcement programme for renewables.
- > Examining the impact of wind-generated electricity, and the effects of interconnection, on the network
- > Committing funds to upgrade the distribution and transmission network

2004 expenditure: €0.01 million

## 2004 Achievements

There is one cluster under development. The status of applications to the Corderry Cluster in Co Leitrim is as follows:  
Four offers accepted. Total: 21.81MW  
Two other applicants. Total: 12.3MW  
No applications at transmission level

### GUDP funding

Following the mid-term review of the NDP, the approved funding for the programme was €28.28 million. To date, contracted expenditure is estimated at €5.72 million to be spent by ESB Networks for the implementation of the Corderry Cluster. The connection of this cluster is scheduled for completion in mid 2005.

## THE COSTS AND BENEFITS OF EMBEDDED GENERATION IN IRELAND

In September 2004, SEI commissioned PB Power to undertake a comprehensive technical, financial and economic cost benefit analysis of the impacts of embedded generation in Ireland. The consultants were also asked to recommend appropriate commercial and technical applications for embedded generators. These applications would be designed to minimise costs and maximise benefits for electricity suppliers, the Transmission System Operator (TSO), the Distribution System Operator (DSO), the embedded generator and the electricity consumer.

### Study Scope

The consultants' review of the costs and benefits of embedded generation covered the following categories:

- > Utilisation of network assets
- > System losses and overall system efficiency
- > Security and quality of supply
- > System reinforcement costs
- > Impact of embedded generation on reinforcement plans
- > System control, load balance and safety

Power system studies were carried out on representative network sections in order to assess the range of costs and benefits that accrue when connecting various penetrations and types of embedded generation.

### Study Results

The consultants proposed methodologies whereby the results of the power system studies could be applied by the network operator when assessing an embedded generator connection application.

The final report has been provided for consideration to the Commission for Energy Regulation, specifically in the context of the current revision of tariff arrangements, as well as to ESB Networks.

The results of the power system studies indicated that there are significant benefits, both short term and long term, which may be accrued in connecting embedded generation to the distribution network. These benefits vary according to the size and type of generator and the manner in which connection to the distribution network is implemented. Simple network tariff arrangements may not fully reflect the positive or negative impacts that connecting a generator at a particular point in the network may have. More sophisticated tariff structures may be required in order to give the correct market signals to small generators.



# Renewable Energy RD&D

Renewable energy will play an increasing role in addressing the Government's energy policy goals. This programme provides funding for research into low cost, high efficiency renewable energy technologies and also addresses commercial and technical barriers.

The aim of SEI's RE RD&D programme is to stimulate the deployment of renewable energy technologies that are close to market, and also to assess and develop potentially successful technologies. The programme provides support for renewable energy product RD&D, market demonstration of new technologies, resource studies and public good research activities.

Programme elements include:

- > Research aimed at developing policy options; defining the market structure; reducing costs; improving reliability and/or opening new markets
- > Feasibility studies for renewable energy projects
- > Demonstration of new technologies aimed at high risk, high reward projects, or non-technical innovation
- > Investigation of core areas that are common to many renewable technologies

2004 expenditure: €3.00 million

## 2004 Achievements

In the period to December 2004, a total of €7 million was committed on 72 projects and €4.5m has been disbursed. In May 2004, the RE RD&D strategy was further refined, with the emphasis for support placed on wind energy, biomass heating, liquid biofuels, wave energy and energy storage technologies. A review of the RE RD&D programme was presented at the Renewable Energy Summit in September, where a number of the programme's key projects were showcased.

The IBS biomass CHP project began operations in May 2004 with support from SEI's Renewable Energy RD&D programme. Coillte installed, and is now operating, a 100 kW wood chip/wood pellet biomass boiler, with grant support also provided by SEI. The boiler will be used to provide training for Irish technicians in the installation and operation of wood heating systems.

Ocean energy continues to attract significant RD&D interest. Three device developers are currently being supported by SEI, which has also commissioned a study aimed at estimating the potential tidal energy resource available to an All-Island electricity market.

## CO-FIRING WITH BIOMASS

Ireland has a number of power stations suitable for co-firing with biomass, including the Moneypoint coal power station, the Edenderry peat power station, and the new peat plants at Lough Ree and West Offaly due to become operational in January 2005.

Under the EU Emissions Trading Scheme (ETS) each of these plants was granted allowances covering 73.7% of their reference CO<sub>2</sub> emission levels. Against this background, and having considered issues such as security and diversity of energy supply, SEI commissioned Electrowatt-Ekono of Finland to examine the implications of co-firing these plants, as a CO<sub>2</sub> abatement measure.

Central to this research was the practical co-firing level and its technical, economic and environmental implications. The study began in October 2003 and was completed by May 2004.

It showed that co-firing is technically feasible in all cases, without modification, particularly in peat plants. While the availability of wood residues at economic cost is more problematic, a 10% level of co-firing in the peat plants is viable under existing cost regimes. The application of notional CO<sub>2</sub> costs of up to €30 per tonne would indicate that greater levels of co-firing are realistic.

Copies of the report on this study were issued to relevant parties, and were also distributed at the Wood Energy 2004 conference (See REIO Case Study).

# Programme Underpinning Functions

## International Energy Agency (IEA) Implementing Agreements

The Department of Communications, Marine and Natural Resources has designated SEI to be the contracting party for three IEA agreements relating to wind, biomass and ocean energy.

### IEA Wind Agreement

Ireland rejoined the IEA R&D Wind Agreement in 2002 and opted to participate in two annexes within that Agreement: Annex XI *Base Technology Information Exchange* and the new Annex XXI *Dynamic Models of Wind Farms for Power System Studies*.

The Irish participant in this research initiative (SEI) has liaised with ESB National Grid in the development of wind turbine dynamic models

In November 2004, SEI hosted an IEA Wind RD&D Agreement topical expert meeting at which it was agreed to initiate the establishment of a new annex. Securing the participation of Irish researchers in this annex will be a priority for SEI.

### IEA Bioenergy Agreement

Since rejoining the IEA Bioenergy Implementing Agreement in October 2002, Ireland has been active in Task 29 (Socio-economic drivers in implementing bioenergy projects), Task 38 (Greenhouse gas balances of biomass and bioenergy systems) and Task 39 (Liquid biofuels from biomass) respectively.

The formal Task 38 meeting takes place in Dublin in 2005, and will be part-sponsored by SEI, which will also host the Autumn 2005 Executive Committee meeting of the IEA Bioenergy Implementing Agreement.

### IEA Ocean Energy Implementing Agreement

The Implementing Agreement on Ocean Energy Systems commenced in October 2001. Programme priorities are ocean-wave and marine current systems. The main tasks identified to date are the exchange of information on ocean energy systems and the development of practices for testing and evaluating ocean energy systems.

### EU Programmes

SEI is responsible for liaising with other national R&D funding bodies, providing representation at EU level and promoting EU and other international RD&D support initiatives.

Four Irish projects were successful under the first Calls for Proposals on the EU 6th Framework Programme for Research. Three of these are medium-term to long-term research projects, one in the area of biofuels and two in ocean research development. The fourth is a short-term to medium-term project examining the integration of micro-CHP and renewable energy technologies. The next call for proposals will focus on sustainable communities.

### External Relations

SEI is responsible for co-ordinating and liaising with relevant bodies on a regional, national and international basis, in order to achieve the most effective advancement of sustainable energy objectives.

SEI continues to participate in the EnR network, the association of European energy agencies. This is a useful medium for evaluating the effectiveness of national programmes and for exploring new initiatives.

# Energy Statistics

The legislation establishing SEI as a new authority gave it responsibility for developing and maintaining comprehensive national and sectoral statistics for energy production, transformation and end use. Against this background, SEI established the Energy Policy Statistical Support Unit (EPSSU) as a specialist team within the Development Services Department.

The role of the EPSSU is:

- > to collect, process and publish energy statistics that support policy analysis and development in line with national needs and international obligations;
- > to conduct statistical and economic analyses of energy services and sustainable energy options in order to inform policy advice and underpin programme prioritisation;
- > to contribute to the development and promulgation of appropriate sustainability indicators, including participation in national and international working groups.

## Energy Statistics Co-ordinating Group

In 2002, the Central Statistics Office (CSO) and SEI jointly established the Energy Statistics Co-ordinating Group, which oversees the implementation of mechanisms for co-operation between both organisations in the area of energy statistics thus facilitating the development and analysis of a more comprehensive body of energy statistics.

## 2004 Publications

### **Energy in Ireland 1990 – 2002**

The second edition of Energy in Ireland was published in May 2004. It examines energy trends in Ireland since 1990 and discusses the underlying causes, and relates trends to Government and EU targets, in order to inform the development of the policies and measures employed to meet these targets. The main highlight of 2004 edition was the significant decoupling of energy from economic growth, and the decoupling of CO<sub>2</sub> emissions from energy consumption.

### **Profiling Energy Consumption and CO<sub>2</sub> Emissions in industry: 2004 update**

This report presented an updated profile of industrial energy use and CO<sub>2</sub> emissions based on recently released 2001 data from the CSO. It also assessed the sensitivity of industrial enterprises to energy price changes.

### **Renewable Energy in Ireland**

Published in August 2004, this report sought to inform strategy and policy development in the renewable energy sector. The report provides a comprehensive dataset and accompanying analysis of renewable energy in Ireland on an All-Island basis.

### **Combined Heat and Power in Ireland**

During 2003, SEI's Energy Policy Statistical Support Unit carried out a survey of combined heat and power (CHP) installations in Ireland. This report, published in March 2004, presented the survey findings and reported on trends in CHP development since 1991.

### **Energy efficiency indicators: Odyssee/Mure Project**

The Odyssee/Mure Project is an EU-wide initiative, which was established in 1992 and involves fourteen Member States. Its aim is to develop, produce and publish appropriate indicators to assess energy trends and gain improved understanding of the drivers behind these trends. 2004 saw the development of a number of aggregate indicators. The project is ongoing subject to annual renewal.

At the end of 2004, SEI signed a two-year contract for the next phase of this project, commencing in April 2005.

### **Energy data harmonisation for CO<sub>2</sub> emissions**

The purpose of this Eurostat-funded project, which was initiated in 2002, is to harmonise the energy data used by the EPA and Eurostat to calculate the national inventory of CO<sub>2</sub> emissions. An interim report on data discrepancies for the years 1990, 1995 and 2000 was forwarded to Eurostat in February 2004. A procedure for the elimination of discrepancies going forward was agreed in March 2004. The final report, which included updated energy data in the form of annual questionnaires for the period 1990 – 2002 was completed in March 2004.

### **Knowledge sharing**

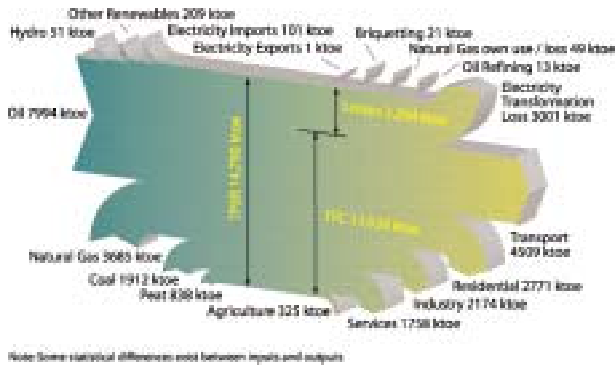
The EPSSU is a member of the National Climate Change Strategy's Inventory Data Users Group, which is responsible for assisting the development of improved inventories and projections, including appropriate disaggregation and a framework for assessing the impacts of different policy and market measures.

The EPSSU also sits on Eurostat's Energy Statistics Committee, and two of the Working Groups concerned with energy efficiency indicators and CHP statistics.

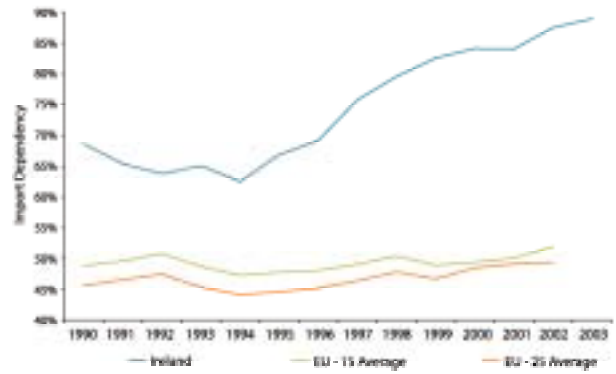
1. The current situation – total primary energy requirement, by fuel and by sector
2. Electricity generation
3. The challenge of Kyoto – Ireland's greenhouse gas emissions by source
4. Energy-related CO<sub>2</sub> emissions by mode of application
5. Renewable energy as a percentage of energy required for electricity production
6. Fuel import dependency – Ireland and the EU

# Extracts from Energy in Ireland

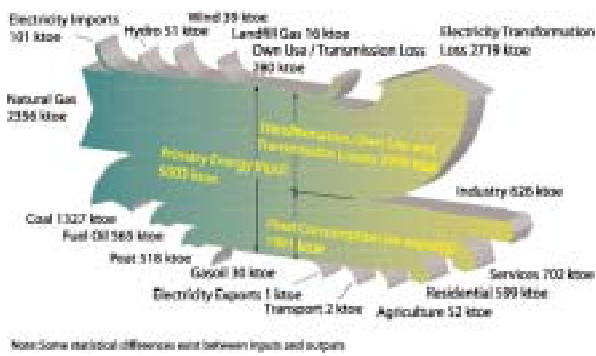
## Energy Flow in Ireland 2003



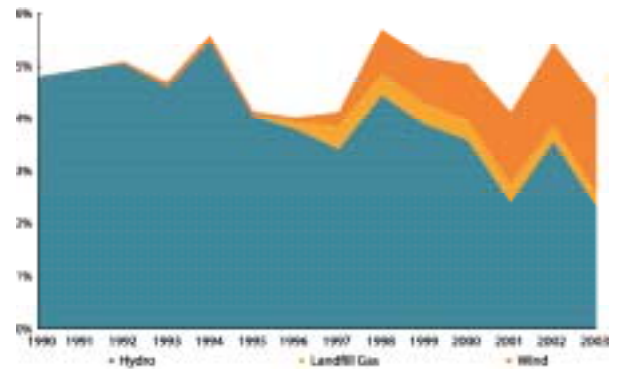
## Import Dependency of Ireland and EU



## Flow of Energy in Electricity Generation 2003



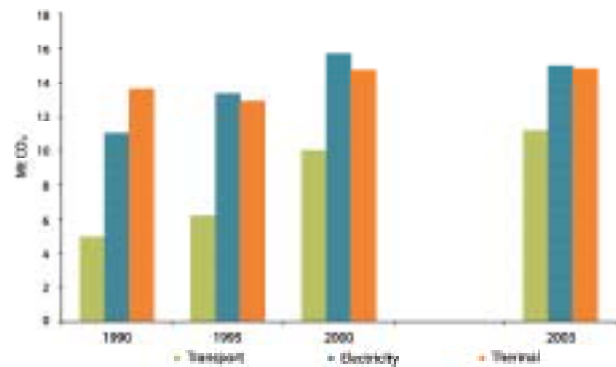
## Renewable Energy Contribution to Gross Electricity Consumption



## Greenhouse Gas Emissions by Source



## Energy Related CO<sub>2</sub> Emissions by Mode of Energy Application



# Administrative Report

## Code of Practice for the Governance of State Bodies

In October 2001 the government approved the new Code of Practice for the Governance of State Bodies. The Board has reviewed the key provisions and adopted measures to ensure compliance.

### Internal Controls

The SEI's internal control system encompasses the policies, processes, tasks, behaviours and other aspects of the organisation, which facilitate effective and efficient operations while ensuring quality reporting and regulatory and legal compliance. As part of this SEI complies with the Code of Practice for the Governance of State Bodies in relation to all procurement, taxation, and internal and external audit obligations.

### Health and Safety

Pursuant to the Safety, Health and Welfare at Work Act, 1989, SEI promotes a positive health and safety culture throughout the organisation. It seeks to provide safe and healthy working conditions, ensure the safety of SEI premises, equipment and general working environment, and ensure, so far as is reasonably practicable, that all those who may be affected by its operations, both staff and public, are not exposed to risks to their health or safety.

SEI's policy is at all times to protect and safeguard the well-being of all employees by maintaining a safe working environment and system of work pursuant to the requirements of the Safety, Health and Welfare at Work Act, 1989.

### Interests of Board Members and Secretary

In accordance with the Department of Finance guidelines for State Agencies, Board members have registered their interests in other undertakings with the Secretary and do not participate in decisions nor receive documentation in relation to these undertakings and others where conflict of interest may arise.

### Location

SEI's main office is located on the Enterprise Ireland campus in Glasnevin and has two regional offices, one located on the Enterprise Ireland premises in Sligo and one located in the Airport Business Park in Cork.

Under the Government's decentralisation programme, SEI's main office is to be relocated to Dundalk, County Louth.

# Appendix 1 - A Selection of SEI Publications

SEI five-year strategy

A review of fuel poverty and low income housing

## **For the Home**

Information guides

Guide to insulating your home

A detailed guide to home heating systems

Building an energy efficient home

Purchasing an older house

Consumer guide to sustainable energy

How to make your home more energy efficient

## **For the School**

Energy resources in Ireland

Energy in our lives

Exploring energy

Guzzler's big book on energy

Hey everything's working

The energy file

## **Industry, Commercial and Public Sector**

### *Industry*

Large Industry Energy Network – annual reports: 2000 to 2003 inclusive.

Annual Self-audit and Statement of Energy Accounts Scheme Annual Report 2000–2001

*Energy Focus* quarterly newsletter

### *Negotiated Agreements*

Negotiated Energy Agreements: Focus on thermal energy reduction

Negotiated Energy Agreements Pilot Project Final Report 2003

Negotiated Energy Agreements Pilot Project Final Report Executive Summary 2003

### *Energy efficiency in buildings*

Commercial/industrial fuels – comparison of energy costs

Good practice case study – BEMS at UCD, Belfield

Good practice case study – Gaelscoil An Eiscir Riada, Tullamore, Co Offaly

Good practice case study – Mater Private Hospital

Good practice case study – Limerick County Hall

Good practice case study – St Dymphna's Hospital Carlow

Good practice case study – Finglas Swimming Pool

Managing energy – A strategic guide for SMEs

## **Statistics**

Energy In Ireland 1990 – 2003: Trends, issues and indicators

Profiling energy consumption and CO<sub>2</sub> emissions in industry

2004 update: Sensitivity to energy price changes

Energy and CO<sub>2</sub> Efficiency in Transport: Analysis of new car registration in year 2000

Combined heat and power in Ireland: Trends and issues 1991 – 2002

## **Renewable Energy and Transport Publications**

### *Wind*

A study on renewable energy in the new Irish electricity market

Attitudes towards the development of wind farms in Ireland

How to develop a wind farm

Operating reserve requirements for wind power penetration increases in the Irish electricity system

### *Biomass and waste*

An assessment of the renewable energy resource potential of dry agricultural residues in Ireland

A resource study on recovered vegetable oil and animal fats

Cofiring with biomass

Landfill gas in Ireland – the facts

Liquid biofuels strategy study for Ireland

Quality Assurance for rapeseed oil as a vehicle fuel

### *Renewable energy in buildings*

Passive solar design – solar homes catch the sun

Solar energy in the home

Solar water heaters

Wood pellet stoves

A renewable heat pump in your house

### *Transport*

The route to sustainable commuting

Sustainable transport

Strategies to reduce greenhouse gases from Irish transportation

## Appendix 2 - Projects Funded in 2004

This appendix sets out a list of all demonstration projects to which money was paid in 2004. It does not contain commissioned studies and reports, educational support, or programme operation and promotion.

### Public Sector Design Study Support Scheme

Cork City Council	€ 6,200
Department of Education & Science	€ 22,110
Forfas	€ 6,000
Kerry County Council	€ 6,875
Midland Health Board	€ 6,000
National University of Ireland - Galway	€ 10,000
Waterford Institute of Technology	€ 7,500
Wexford County Council	€ 7,500
	<u>€ 72,185</u>

### Public Sector Model Solutions Investment Scheme

Cork County Council	€ 5,750
Department of Defence	€ 38,026
Dublin City Council	€ 58,664
Dublin City University	€ 50,000
Dublin Institute of Technology	€ 69,271
Dundalk Institute of Technology	€ 40,945
Holles Street Maternity hospital	€ 259,937
Kildare Co Council	€ 50,061
Letterkenny Institute of Technology	€ 34,784
Limerick City Fire Brigade	€ 29,711
Mayo County Council	€ 9,590
Mercy University Hospital	€ 14,782
North Eastern Health Board	€ 23,550
Office of Public Works	€ 97,483
Revenue Commissioners	€ 11,258
Sligo Corporation	€ 20,804
South Tipperary County Council	€ 58,573
University College Cork	€ 316,000
University College Dublin	€ 157,639
University of Limerick	€ 47,989
Western Health Board	€ 132,322
	<u>€ 1,527,139</u>

### Energy Management Bureau

'e3' – UCD, DCU, DIT & Trinity	€ 18,482
OPW	€ 48,919
	<u>€ 67,401</u>

### Low Income Housing

Action Inishowen	€ 32,822
Clondalkin Home Improvement Project	€ 113,470
Cunamh Energy Action Ltd	€ 90,565
Energy Action	€ 173,463
Meitheal Forbartha na Gaeltachta	€ 22,300
Northside Community Enterprises Safe Ltd	€ 110,834
Southill Community Services Board	€ 18,391
Wexford Area Partnership	€ 27,645
	<u>€ 589,490</u>

## Appendix 2 - Projects Funded in 2004

### Renewable Energy RD&D

Airtricity Developments (Ireland) Ltd	€ 83,056
Anthony Childs	€ 13,141
Arsenal et al	€ 24,515
ART Generation	€ 11,146
Biogreen Fuels Ltd	€ 48,922
Camphill Community Jerpoint Thomastown	€ 18,107
CENER	€ 49,380
Clearpower Limited	€ 9,208
Coillte	€ 72,086
CSA Group Ltd.	€ 77,008
Danish Energy Authority	€ 20,070
Dunstar Ltd	€ 4,075
Electricity Research Centre, UCD	€ 40,547
ESBI Consultants	€ 10,073
Freshford 20/20 Ltd.	€ 20,000
Gaoth Tec Teo	€ 191,239
Glanbia Plc	€ 34,250
Glenstal Abbey	€ 9,298
Independent Biomass Systems	€ 500,000
Institute for Numerical Computation and Analysis/Airtricity Ltd.	€ 6,825
Marketmaker Software Ltd	€ 13,750
Meenacloghspar Ltd	€ 59,329
Ocean Energy Ltd	€ 19,383
Riso National Laboratory	€ 45,488
Shamrock Solar Energies Ltd	€ 8,155
The Western Development Commission	€ 8,000
Tipperary Co-Operative Creamery Ltd	€ 15,700
Wavebob Ltd	€ 21,574
Youngfield Workshops	€ 24,303
	<u>€ 1,458,628</u>

### CHP/District Heating

BMF Business Services	€ 25,298
	<u>€ 25,298</u>

### House of Tomorrow RD&D

Brothers of Charity	€ 30,795
Camphill Communities	€ 22,500
Century Homes Ltd	€ 138,830
Des Foley	€ 25,000
Dublin City Council	€ 200,000
Environmental Protection Agency	€ 4,305
Galway City Council	€ 160,000
Galway Energy Agency	€ 1,250
McInerney Homes Ltd	€ 45,000
O Mahony Pike Architects	€ 7,500
Radon Ireland Group Ltd	€ 30,000
Tralee Town Council	€ 96,000
University College Cork	€ 4,800
University College Dublin	€ 15,825
University College Dublin/ERG	€ 5,412
	<u>€ 787,218</u>

### Transport

Dublin City Council	€ 100,000
	<u>€ 100,000</u>



**our mission** is to promote and assist the development of sustainable energy



## Financial Statements for the year ended **31<sup>st</sup> December 2004**

### **Contents**

Statement on System of Internal Financial Control	1
Responsibilities of the Board	2
Report of the Comptroller and Auditor General	3
Accounting Policies	4
Income and Expenditure Account	5
Balance Sheet	6
Notes to the Financial Statements	7-15

## Statement on System of Internal Financial Control

---

**On behalf of the Board of Sustainable Energy Ireland, I acknowledge our responsibility for ensuring that an effective system of internal financial control is maintained and operated.**

The system can only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or would be detected in a timely period.

### Key Control Procedures

The Board has taken steps to ensure an appropriate control environment by clearly defining management responsibilities including that of reporting significant control failures and ensuring appropriate corrective action.

The Board has established processes and practices to identify and evaluate business risks by

- > identifying the nature, extent and financial implication of risks ;
- > assessing the likelihood of identified risks occurring;
- > and is currently assessing the body's ability to manage and mitigate the risks that do occur.

The system of internal financial control is based on a framework of regular management information, administrative procedures including segregation of duties, and a system of delegation and accountability. In particular it includes:

- > a comprehensive budgeting system with an annual budget which is reviewed and agreed by the Board;
- > regular reviews by the Board of periodic and annual financial reports which indicate financial performance against forecasts;
- > setting targets to measure financial and other performance;
- > appropriate indicative investment levels for funding programmes.

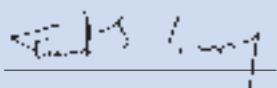
Sustainable Energy Ireland's internal audit function was contracted out to a firm of accountants at the end of 2002. The annual internal audit plan, which has been developed, is informed by an analysis of the risks to which the authority is exposed. This approach is endorsed by the Audit Committee and approved by the Board. A three year Internal Strategic Audit Plan is approved by the audit committee and revised annually where required. The internal auditors provide the Committee with reports on assignments carried out. These reports highlight deficiencies or weaknesses, if any, in the system of internal financial control.

The Board has monitored and reviewed the effectiveness of the system of internal financial control having regard to the reports and work undertaken by management, the policies and procedures working group, the audit committee and the internal auditors, together with the risk management process currently being undertaken by the organisation.

### Annual Review of Controls

I confirm that in respect of the year ended 31st December 2004, the Board had conducted a review of the effectiveness of the system of internal financial controls.

### Signed on behalf of the Board



Chairperson

Sustainable Energy Ireland – The Sustainable Energy Authority of Ireland (known as Sustainable Energy Ireland) was established under the Sustainable Energy Act 2002 and came into existence on the 1st May 2002. Under section 21(2) of the Act all equipment and property of Enterprise Ireland, for the use of the Irish Energy Centre, other than the property referred to in s21(1) of the Act, was transferred to Sustainable Energy Ireland on that date.

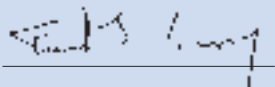
Section 24(2) of the Sustainable Energy Act 2002 requires the Authority to prepare financial statements, in such format as may be approved by the Minister for Communications, Marine and Natural Resources with the consent of the Minister for Finance.

In preparing these financial statements the Board is required to:

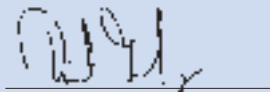
- > Select suitable accounting policies and apply them consistently.
- > Make judgments and estimates that are reasonable and prudent.
- > Prepare the financial statements on a going concern basis unless it is inappropriate to presume that it will continue in operation.
- > State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.

The Board is responsible for keeping proper books of account, which disclose, with reasonable accuracy at any time, the Authority's financial position and which enable it to ensure that the financial statements comply with Section 24 of the Sustainable Energy Act 2002. The Board is also responsible for safeguarding all assets under its operational control and hence, for taking reasonable steps for the prevention and detection of fraud and other irregularities.

**Signed on behalf of the Board**



**Frank Convery**  
Chairman



**David Taylor**  
Chief Executive Officer

## Report of the Comptroller and Auditor General for Presentation to the Houses of the Oireachtas

---

I have audited the financial statements on pages 4 to 15 under Section 24(3) of the Sustainable Energy Act, 2002.

### **Respective Responsibilities of the Members of the Board and the Comptroller and Auditor General**

The accounting responsibilities of the members of the Board are set out on page 2. It is my responsibility, based on my audit, to form an independent opinion on the financial statements presented to me and to report on them.

I review whether the statement on the system of internal financial control on page 1 reflects the Authority's compliance with applicable guidance on corporate governance and report any material instance where it does not do so, or if the statement is misleading or inconsistent with other information of which I am aware from my audit of the financial statements.

### **Basis of Audit Opinion**

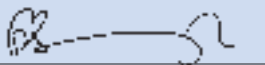
In the exercise of my function as Comptroller and Auditor General, I conducted my audit of the financial statements in accordance with auditing standards issued by the Auditing Practices Board and by reference to the special considerations which attach to State bodies in relation to their management and operation.

An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Authority's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations that I considered necessary to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement whether caused by fraud or other irregularity or error. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements.

### **Opinion**

In my opinion, proper books of account have been kept by the Authority and the financial statements, which are in agreement with them, give a true and fair view of the state of affairs of the Sustainable Energy Authority of Ireland at 31 December 2004 and of its income and expenditure for the year then ended.



**Gerard Smyth**  
**For and on behalf of the**  
**Comptroller and Auditor General**  
**9th June 2005**

**(A) Period of Financial Statements**

The financial statements cover the period from 1st January to 31st December 2004.

**(B) Basis of Accounting**

The financial statements have been prepared on an accruals basis, except as stated below and in accordance with Generally Accepted Accounting Practice, under the historical cost convention, and in the format approved by the Minister for Communications, Marine and Natural Resources. Financial Reporting Standards adopted by the recognised accountancy bodies are adopted as they become applicable. The unit of currency in which the financial statements are denominated is the Euro.

**(C) State Grants**

State Grants shown in the Income and Expenditure Account reflect the amount received from the Department of Communications, Marine and Natural Resources.

**(D) Fixed Assets**

Fixed assets are stated at cost less accumulated depreciation. Depreciation is calculated in order to write off the cost of fixed assets over their estimated useful lives as follows:

Motor Vehicles	20%
Fixtures and Fittings	33.33%
Computer Equipment	33.33%
Software	33.33%

**(E) Superannuation**

Section 17 of the Sustainable Energy Act 2002 provides for the establishment of superannuation schemes by the Authority. The scheme is a defined benefit scheme for the purposes of the Pension Act, 1990. The scheme is being operated on an administrative basis pending its approval by the Minister for Communications, Marine and Natural Resources, with the consent of the Minister for Finance.

**(F) Capital Account**

The Capital Account represents the unamortised value of income used to purchase fixed assets.

## Income and Expenditure Account


for the year ended 31<sup>st</sup> December 2004

	Notes	2004	2003
Income		€	€
State Grants	1	13,868,000	13,250,000
EU Contract Income	2	24,129	(22)
Other Income	3	227,013	228,386
<b>Total Income</b>		<b>14,119,142</b>	<b>13,478,364</b>
<b>Transfer to Capital Account</b>	14	(39,570)	(133,617)
		<b>14,079,572</b>	<b>13,344,747</b>
<b>Expenditure</b>			
Salaries, Pensions & Related Charges	4	3,055,159	2,437,416
Recruitment, Training & Education	5	147,098	238,076
Advertising and Promotion	6	1,683,662	1,775,714
General Consultancy and Professional fees	7	436,175	379,425
General Administration	8	793,498	711,689
Built Environment Programme	9	2,964,642	4,519,257
Research & Development Programme	10	4,587,474	2,517,168
Alternative Energy Programme	11	817,476	894,251
<b>Total Expenditure</b>		<b>14,485,184</b>	<b>13,472,996</b>
<b>Deficit for the Year</b>		<b>(405,612)</b>	<b>(128,249)</b>
<b>Surplus at 1 January</b>		<b>363,811</b>	<b>492,060</b>
<b>(Deficit)/Surplus at 31 December</b>		<b>(41,801)</b>	<b>363,811</b>

The Board has no gains or losses in the financial period other than those dealt with in the Income and Expenditure Account. The Statement of Accounting Policies and Notes 1 to 20 form part of these financial statements.



**Frank Convery**  
Chairman



**David Taylor**  
Chief Executive Officer

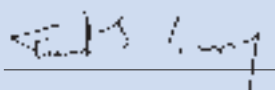
# Sustainable Energy Ireland

## Balance Sheet


as at 31<sup>st</sup> December 2004

	Notes	2004	2003
<b>Assets</b>		€	€
Fixed assets	12	218,141	178,572
<b>Current Assets</b>			
Bank		581,157	566,977
Debtors		103,200	147,394
Prepays		9,309	9,506
		<b>693,666</b>	<b>723,877</b>
<b>Current Liabilities</b>			
Creditors	13	582,133	162,008
Accruals		89,237	94,080
VAT		64,097	103,978
		<b>735,467</b>	<b>360,066</b>
Net Current Assets /(Liabilities)		<b>(41,801)</b>	<b>363,811</b>
<b>Total Net Assets</b>		<b>176,340</b>	<b>542,383</b>
<b>Financed By</b>			
Capital	14	218,141	178,572
Income and Expenditure Account		(41,801)	363,811
		<b>176,340</b>	<b>542,383</b>

The Statement of Accounting Policies and Notes 1 to 20 form part of these financial statements.



**Frank Convery**  
Chairman



**David Taylor**  
Chief Executive Officer

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004**1. State Grants**

Under section 22(1) of the Sustainable Energy Act 2002 the Minister for Communications, Marine and Natural Resources provides funding to the Authority for the performance of its functions. The funding provided in the year under the Economic and Social Infrastructure Operational Programme (ESIOP) consists of the following:

	<b>2004</b>	<b>2003</b>
Institutional Infrastructure	€5,741,000	€5,400,000
Built Environment	€2,805,000	€4,500,000
Research & Development	€4,542,000	€2,490,000
Alternative Energy	€780,000	€860,000
	<b>€13,868,000</b>	<b>€13,250,000</b>

The Economic and Social Infrastructure Operational Programme was funded by the Irish Government under the National Development Plan 2000-2006 with programmes part funded by the European Union. Included in the Built Environment income is an amount of €127,000 which was paid to Energy Action on behalf of the Department of Communications, Marine and Natural Resources (DCMNR). This item of expenditure is also reflected in the Built Environment expenditure figure in Note 9.

**2. EU Contract Income**

The funds from EU contracts are from activities in Energy Efficiency and Renewable Energy including technology promotion, information dissemination, research and event co-ordination and management.

**3. Other Income**

Other income consists of proceeds from Boiler House Management courses run in the period. The Energy Show was also run within the period which is a bi-annual event.

	<b>2004</b>	<b>2003</b>
Workshop Income	€57,720	€28,500
Other Income	€19,293	€4,886
Car Free Day Contributions	€150,000	€195,000
	<b>€227,013</b>	<b>€228,386</b>

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004

### 4. Remuneration and Other Pay Costs

The Authority is making the necessary deductions from salaries for employee pension contributions, which are being retained and are included in Creditors pending their transfer to the Department of Communications Marine and Natural Resource. The authority is not required to make employer contributions to the scheme.

	2004	2003
Salaries and Pensions	€2,380,587	€1,948,935
Employer's contribution to social welfare	€225,991	€186,554
Staff superannuation contributions	€130,267	€115,783
Agency/Contract Staff	€117,768	€7,440
Board member emoluments	€200,546	€178,704
	<b>€3,055,159</b>	<b>€2,437,416</b>

### 5. Recruitment, Training and Education

	2004	2003
Staff Training & Recruitment	€126,199	€222,181
Staff Subscriptions & Publications	€17,826	€11,089
Staff Meetings	€3,073	€4,806
	<b>€147,098</b>	<b>€238,076</b>

### 6. Advertising and Promotion

	2004	2003
Advertising Costs	€468,410	€672,123
Print & Design	€356,949	€332,529
Sponsorship	€271,288	€318,419
Press Relations	€171,914	€121,906
Workshop Costs	€171,740	€105,153
Materials	€117,230	€121,256
General Promotional Activities	€76,106	€70,234
Development of Web Site	€50,025	€34,094
	<b>€1,683,662</b>	<b>€1,775,714</b>

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004**7. General Consultancy and Professional Fees**

	<b>2004</b>	<b>2003</b>
Sustainable Energy Services	€21,875	€18,887
Organisational Development	€142,257	€91,394
PR & Advertising	€30,135	€17,434
Industry & Boiler	€128,658	€101,500
Schools Programme	€18,371	€13,985
Local Energy Agency Liaison	€11,773	€61,069
Energy Policy Statistical Support Unit	€51,777	€49,679
Other	€31,329	€25,477
	<b>€436,175</b>	<b>€379,425</b>

**8. General Administration**

	<b>2004</b>	<b>2003</b>
Building & Other Service Charges	€245,133	€243,445
Travel & Subsistence - Staff	€204,495	€179,583
- Board	€19,302	€20,013
Repairs & Maintenance	€153,542	€93,034
Audit Fees - Internal	€35,054	€30,582
- External	€15,000	€10,000
Insurance & Legal	€43,821	€56,277
Telephone	€8,946	€9,712
Stationery	€16,581	€24,534
Other	€51,624	€44,509
	<b>€793,498</b>	<b>€711,689</b>

### 9. Built Environment

This sub-measure, which is aimed at improving the energy performance of the national building stock, has three separate components.

- > The Public Sector Programme directs resources at improvements in public buildings allowing the public sector to play an exemplar role.
- > Home Energy Rating is intended to develop an energy rating system to allow energy efficiency become a factor in home rental and purchase decisions.
- > Low Income Housing addresses the energy efficiency aspects in homes occupied by fuel poor households.

	2004	2003
<b>Low Income Housing:</b>		
Grants Issued	€728,492	€555,268
Programme Operation/ Promotion	€216,940	€236,242
<b>Public Sector Programme:</b>		
Grants Issued	€1,807,490	€3,618,226
Programme Operation /Promotion	€24,449	€27,408
Commissioned Studies/Reports	€159,739	€0
<b>Home Energy Rating:</b>		
Commissioned Studies/Reports	€0	€65,340
Programme Operation/Promotion	€27,532	€16,773
	<b>€2,964,642</b>	<b>€4,519,257</b>

Included in the Built Environment expenditure is an amount of €127,000 which was paid to Energy Action on behalf of the Department of Communications, Marine and Natural Resources (DCMNR). This item of expenditure is also reflected in the Built Environment income figure in Note 1.

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004**10. Research and Development**

The Research and Development sub measure supports the development and application of sustainable energy practices in Irish housing. It also offers support for projects aimed at generating and applying technologies, products, practices and information leading to the increased utilisation of renewable energy.

	2004	2003
<b>House of Tomorrow:</b>		
Grants Issued	€810,468	€418,863
Commissioned Studies/Reports	€121,562	€0
Programme Operation/Promotion	€56,319	€64,043
<b>Renewables:</b>		
Grants Issued	€1,458,628	€500,133
Commissioned Studies/Reports	€886,835	€537,348
Educational Support	€183,642	€0
Programme Operation/Promotion	€475,189	€431,914
<b>Industry:</b>		
Grants Issued	€0	€238,766
Programme Operation/Promotion	€494,831	€326,101
<b>Transport:</b>		
Grants Issued	€100,000	€0
	<b>€4,587,474</b>	<b>€2,517,168</b>

**11. Alternative Energy**

This measure provides funding in three areas as follows: Electricity and Heat Infrastructure €6,400, the pilot CHP/district heating programme €134,560 and the Renewable Energy Information Office (REIO), which is a national service of the Authority, established to promote the use of renewable energy resources €676,516.

	2004	2003
Grants Issued	€717,188	€857,739
Commissioned Studies/Reports	€88,831	€0
Programme Operation/Promotion	€11,457	€36,512
	<b>€817,476</b>	<b>€894,251</b>

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004

### 12. Fixed Assets

<b>Fixed Assets 2004</b>	<b>Computer Equipment and Software</b>	<b>Fixtures &amp; Fittings</b>	<b>Motor Vehicles</b>	<b>Total</b>
	€	€	€	€
<b>Cost :</b>				
As at 01 Jan 2004	133,868	50,721	40,750	225,339
Additions	123,162	10,766	0	133,928
Disposals	2,958	0	0	2,958
<b>As at 31 Dec 2004</b>	<b>254,072</b>	<b>61,487</b>	<b>40,750</b>	<b>356,309</b>
<b>Depreciation :</b>				
As at 01 Jan 2004	32,061	7,235	7,471	46,767
Charge for Period	62,315	20,936	8,150	91,401
<b>As at 31 Dec 2004</b>	<b>94,376</b>	<b>28,171</b>	<b>15,621</b>	<b>138,168</b>
<b>Net Book Amount</b>				
<b>As at 31 December 2004</b>	<b>159,696</b>	<b>33,316</b>	<b>25,129</b>	<b>218,141</b>
<b>As at 31 December 2003</b>	<b>101,807</b>	<b>43,486</b>	<b>33,279</b>	<b>178,572</b>

### 13. Creditors

	<b>2004</b>	<b>2003</b>
Retained Staff Superannuation Contributions	€291,660	€161,393
Trade Creditors	€290,473	€65
Other	€0	€550
	<b>€582,133</b>	<b>€162,008</b>

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004

## 14. Capital Account

	2004	2003
Opening Balance	€178,572	€44,955
<b>From Income &amp; Expenditure Account</b>		
To fund Fixed Asset Additions less Disposals	€130,970	€176,771
Amortisation in line with asset Depreciation	(€91,401)	(€43,154)
	€39,569	€133,617
<b>Balance at End of Period</b>	<b>€218,141</b>	<b>€178,572</b>

## 15. Employees

**Permanent Staff**

The average number of permanent employees for the period was 12.

**Contract Staff**

The average number of contract staff resources employed by Sustainable Energy Ireland for the period was 30.

## 16. Premises

The Sustainable Energy Authority of Ireland occupies, under licence, buildings owned by Enterprise Ireland.

## 17. FRS17

Sustainable Energy Ireland operates a defined benefit superannuation scheme for staff. The authority is making the necessary deductions from salaries for pension contributions, which are being retained but not recognised as income. They are included in creditors and will be returned to the Department of Communications Marine and Natural Resources as appropriation-in-aid in 2005. Superannuation entitlements arising under the scheme are paid out of current income and are charged to the Income and Expenditure Account, net of employee superannuation contributions, in the year in which they become payable.

A new accounting standard, Financial Reporting Standard No. 17 – Retirement Benefits (FRS 17), was issued by the Accounting Standards Board in November 2000. Compliance with the new standard does not become mandatory until the financial year 2005. However, in accordance with the transitional arrangement set down by the standard, SEI is required to disclose the assets (if any) and liabilities related to the pension scheme for its employees by way of a note to the accounts. The results set out below are based on an actuarial valuation of the liabilities in respect of SEI staff as at 31 December 2004. This valuation was carried out using the projected unit method.

The financial assumptions used to calculate scheme liabilities for the purpose of FRS 17 were as follows:

	2004	2003
Discount rate Assumption	5.5%	6%
Salary increase assumption	4%	4%
Pension increase assumption	4%	4%
Price inflation	2%	2%

On the basis of these assumptions, and using the projected unit method prescribed in FRS17, the value of the accrued liabilities in respect of SEI staff at 31 December 2004 was estimated at **€5.0m** (compared with **€3.5m** as at 31 December 2003).

### 17. FRS17- continued

As the scheme is unfunded there are no assets held in respect of the accrued pension liabilities of SEI staff.

If the requirements of FRS 17 were fully adopted in 2004 the following would have been reflected in the financial statements:

**Analysis of the amount that would have been charged to operating profit under FRS 17 is as follows:**

Current service cost	€440,000
Past service cost:	-
<hr/>	
Total operating charge	€440,000

**Analysis of the amount that would have been credited to other finance income is as follows:**

Interest on pension scheme liabilities	(€210,000)
--	------------

**Analysis of the amount that would have been recognised in the statement of total recognised gains and losses (STRGL) is as follows:**

Experience gains and losses arising on the scheme liabilities:	(€160,000)
Changes in assumptions underlying the present value of the scheme liabilities:	(€670,000)
Actuarial gain/(loss) recognised in STRGL:	(€830,000)

**Movement in deficit during the year**

Deficit at beginning of year:	(€3,500,000)
Current service cost:	(€440,000)
Interest on scheme liabilities	(€210,000)
Actuarial gain/(loss) recognised in STRGL	(€830,000)
<hr/>	
Deficit in scheme at end of year	(€4,980,000)

## Notes to the Financial Statements

Year ended 31<sup>st</sup> December 2004

---

### 18. Commitments

It is estimated that future payments likely to arise from commitments entered into under various support schemes will amount to €16,103,789.

### 19. Board members – Disclosure of Interests

The Board adopted procedures in accordance with section 18 of the Sustainable Energy Act 2002.

### 20. Approval of Financial Statements

The Board approved the financial statements on the 31st of March 2005.

Is é **an misean atá againn** ná cuidiú le forbairt fuinnimh inmharthana agus é a chur chun cinn



## Tuairisc Bhliantúil **2004**

# Is é an misean atá againn ná cuidiú le forbairt fuinnimh inmharthana agus é a chur chun cinn

Tá mandáit againn cuidiú le táirgeadh, úsáid agus soláthar fuinnimh, atá inmharthana ó thaobh an chomhshaoil na heacnamaíochta de, agus iad a a chur chun cinn, mar thacaíocht do bheartas rialtais i ngach earnáil den gheilleagar.

## Feidhmeanna Fhuinneamh Inmharthana na hÉireann (faoi mar atá sainmhínithe san Acht um Fhuinneamh Inmharthana, 2002):

- > Cuidiú le táirgeadh, soláthar agus úsáid fuinnimh atá inmharthana ó thaobh an chomhshaoil agus na heacnamaíochta de agus iad a chur chun cinn
- > Cuidiú le tósaíocht fhuinnimh agus foinsí fuinnimh in-athnuaite agus iad a chur chun cinn
- > Cuidiú le laghdú astuithe de na gáis cheaptha teasa agus de na truailléáin aeir thrasteorainneacha a bhaineann le táirgeadh, soláthar agus úsáid fuinnimh agus é a chur chun cinn
- > Cuidiú le tionchar tháirgeadh, sholáthar agus úsáid fuinnimh a íoslaghdú agus é sin a chur chun cinn
- > Cuidiú le taighde, forbairt agus taispeáint tósaíochta fuinnimh agus teicneolaíochtaí fuinnimh in-athnuaite agus iad a chur chun cinn
- > Comhairle, eolas agus treoir a sholáthar:
  - \* don Aire Cumarsáide, Mara agus Acmhainní Nádúrtha, agus d'airí eile den chineál sin nó d'fhorais faoi mar a iarrfaidh an tAire
  - \* do sholáthróirí agus d'úsáideoirí fuinnimh

**Fuinneamh Inmharthana na hÉireann**  
Glas Naíon, Baile Átha Cliath 9, Éire

t +353 1 836 9080  
f +353 1 837 2848  
e [info@sei.ie](mailto:info@sei.ie)  
w [www.sei.ie](http://www.sei.ie)



*Sustainable Energy Ireland is funded by the Irish Government under the National Development Plan 2000-2006 with programmes part financed by the European Union.*

# Ábhair

<b>Ráiteas an Chathaoirligh</b>	2
<b>Tuarascáil an Phríomhoifigigh Fheidhmeannaigh</b>	3
<b>Baill an Bhoird</b>	4
<b>Coistí an Bhoird</b>	5
<b>Clár i 2004</b>	6
<b>Bunfheidhmeanna an chlár</b>	19
<b>Staitisticí Fuinnimh</b>	20
<b>Tuarascáil Riaracháin</b>	22
<b>Aguisín 1 – Rogha Foilseacháin FIE</b>	23
<b>Aguisín 2 – Tionscadail Fhaofa i 2004</b>	24

# Ráiteas an Chathaoirligh

**Bliain ba ea 2004 inar tharla a lán don eagraíocht seo againne agus don chlár oibre um Fuinneamh Inmharthana Éireann. Tá an dúshlán seo a leanas ag baint le cinneadh an rialtais an eagraíocht a dílárnú go Dún Dealgan. Tá scil agus tiomantas thar chionn léirithe ag ár bhfoireann trínár gclár oibre a bhrú chun tosaigh; conas is féidir linn meanma a choinneáil agus a fhorbairt i gcomhthéacs an dílárnaithe seo?**

Tá aghaidh tugtha againn air seo ag leibhéal an bhoird trí chead agus tacaíocht a thabhairt don Fheidhmeannas, oibriú leis an rialtas ar mhaithe lenár bpunann a leathnú agus a dhoimhniú ionas gur spás níos spreagúla agus níos sásúla é an FÍÉ le haghaidh cúrsaí oibre. Is obair leanúnach fós é an clár oibre atá ag eascairt ón dualgas/brief seo atá orainn ach, áirítear ann: forbairt réigiún Dhún Dealgain atá ina eiseamláir den chleachtas is fearr maidir le fuinneamh inmharthana; ról lárnach a ghlacadh maidir le múnú beartas agus cláracha a dhéanfadh leas don Tuisceart agus don Deisceart araon; ár n-iarraicteá maidir le taighde agus forbairt punainne a neartú; agus é seo uilig a dhéanamh ó fhoirgneamh den dearadh is déanaí a bheadh mar eiseamláir den chleachtas is fearr maidir le húsáid fuinnimh cé acu an aisfheistiú nó foirgneamh nua é. Tá dul chun cinn tábhachtach déanta chun tabhairt faoin bpunann seo agus saincheisteanna níos laethúla ach fós tábhachtach bainteach le hathlonnú idir lámha ag an am céanna.

Nuair a dhéantar feabhas ar dhul chun cinn inmharthanacht sholáthar fuinnimh ciallaíonn sé go mbíonn méadú ar fhuinnimh a thagann ó fhoinsí in-athnuaite dúchasacha agus neamhthruaillithe. Nuair a dhéantar feabhas ar dhul chun cinn inmharthanachta úsáid fuinnimh bíonn méadú ar cé chomh héifeachtach is a bhaintear úsáid as fuinneamh ionas go seachadtar na seirbhísí fuinnimh chéanna fad is a bhíonn níos lú fuinnimh á úsáid. Taispeánann an dá thasc seo go gcuirtear tionchar i bhfeidhm ar chinntí sholáthróirí agus thomaltóirí araon ionas go mbíonn an tslí ina iompraíonn siad iad féin níos inmharthana. Tá líon áirithe ionstraimintí beartas againn chun an t-athrú iompraíochta seo a bhaint amach. Áirítear ina measc eolas, praghasanna, cuisíonn rialachan, comhaontuithe deonacha no idirbheartaithe agus taighde agus forbairt.

Más féidir linn na hionstraimí beartas seo go léir a chur ag obair le chéile i dtreo sholáthar fuinnimh in-athnuaite agus caomhnú fuinnimh a mhéadú, is féidir linn dul chun cinn go tapa in ár misean inmharthana. Ach ní mór é seo a dhéanamh i mbealach nach ndéanann damáiste do – ach a bhéifear ag súil go bhfeabhsódh - ár n-iomaíocht fhoriomlán. Táimid ag obair leis an rialtas le saoránaigh agus leis an earnáil phríobháideach chun na sonraí agus an fhianaise a chur ar fáil a ligeann dúinn dul ar aghaidh ar na saincheisteanna seo go léir. Maidir le heolas, cuireann ár nAonad Tacaíochta Staitisticíúil um Beartas Fuinnimh, atá bunaithe i gCorcaigh, sraith ainlísithe ar fáil, a dhéanann an comhthéacs stairiúil, na roghanna atá againn agus na himpleachtaí a bhaineann leo a dhoiciméadú. Tá ár gcláracha oideachais agus ár láithreán líonra araon – ag a bhfuil ár bhfoilseacháin go léir ar líne – ag éamhnú ionas go bhfuil cumas tuisceana agus gníomhaithe ag ár saoránaigh go léir.

Mar gheall ar chomharthaí praghasanna, is dea-scéal gur faomhadh scéim trádála astuithe an Aontais Eorpaigh i 2004 – le tosú in Eanáir 2005. Tugtar leithdháileadh. Tugtar leithdháileadh do gach insealbhú – tionscaláíocht throm agus gineadh leictreachais – a áirítear sa scéim, é curtha in iúl i dtionnta de CO<sub>2</sub> astuithe in aghaidh na bhiana, do na hearnáil seo. Má astuíteann an comhlacht níos mó ná an leithdháileadh seo, ní mór dó líuntaisí a cheannach in áit mhargaidh na hEorpa chun a chuid astuithe a chlúdach, nó d'fhéadfadh piónós ghéar a ghearradh air. Ar an lámh eile, má astuíteann sé níos lú ná mar atá ceadaithe dó, is féidir leis an farasbharr idir an méid atá ceadaithe dó agus a chuid astuithe a dhíol isteach sa mhargadh. Agus mé á scríobh seo (30 Márta 2005) is é €14.08 paghas an tonna. Is

iontach an nuálacht é seo, ar thugamar tacaíocht láidir dó: don chéad uair, tá a fhios acu siúd atá bainteach leis gur féidir leo airgead a dhéanamh nó a shábháil trí astuithe de gháis cheaptha teasa a laghdú. Agus ar an lámh eile, d'fhéadfadh an easpa airde ar ghníomhaíocht astuithe charbóin an-damáiste a dhéanamh. Táthar tógtha suas, go díreach, i dtéarmaí tráchtála le hastuithe gháis cheaptha teasa, don chéad uair.

Moladh go mbeadh cáin charbóin i gceist, curtha ar na hearnáil seo nach raibh áirithe sa scéim trádála, le lacáistí an-mhóra do chomhlachtaí a bhain amach spriocanna tiosaíochta fuinnimh dúshlánacha. D'fhógair an rialtas nach raibh sé ag dul ar aghaidh leis an gcuid seo den bheartas.

Táimid ag leanúint ar aghaidh le dul chun cinn a dhéanamh, áfach: ár gclár deonach, ina leagann cuid dár gcomhlachtaí ardfheimhíochta síos spriocanna deonacha an-dúshlánacha i gcásanna áirithe agus éiríonn leo iad a bhaint amach; cuirfidh ár dTeach an Lae Amáirigh agus tionscadail taispeántais ón Earnáil Phoiblí caighdeán rialacháin agus smachta ar fáil; agus tá go leor foghlamtha againn ón taithí atá againn lenár gclár Taighde agus Forbartha nua a mbeidh an-luachmhar de réir mar a bheidh cúrsaí fuinnimh mar chuid lárnach de " gheilleagar an eolais."

Tugaimid aghaidh ar 2005 ar an eolas, go bhfuil cosaint tugtha dúinn go dtí seo ón gcuid is mó de neart an ardaíthe i bpraghasanna ola trí ardú luach an Euro in aghaidh dolair na Stát Aontaithe. D'fhéadfadh nach leanfadh an deascéal seo ar aghaidh – d'fhéadfadh geitphraghasanna móra a bheith ar an mbealach chugainn. Tá a fhios againn freisin gur thug an rialtas le fios go a shamhlaíonn sé caiteachas de €185 milliúin sa tréimhse 2008 – 2012 chun líuntaisí gháis cheaptha teasa a cheannach ar an margadh idirnáisiúnta chun an bearna idir ár dtiomantais do Kyoto agus ár n-astuithe a dhéanamh suas. Tugann siadsan dúshlán agus deis dúinn: conas is féidir linn a bheith cliste – an damáiste don gheilleagar de bharr na n-arduithe géara praghasanna a laghdú agus na hiocaíochtaí chun ár dualgaisí do Kyoto a chomhlíonadh – fad is atáimid ag chur chun tosaigh ár gcláracha oibre tiosaíochta agus in-athnuaite? Tá sé socraithe go daingean ag SEI a chuid féin a dhéanamh chun an dúshlán seo a ghlacadh agus oibriú leis an rialtas le lucht gnó agus pobal leasa agus – b'fhéidir níos tábhachtaí fós - lenár gcomhshaoir chun dul chun cinn a dhéanamh sna cúrsaí seo. Ar son an bhoird, ba mhaith liom mo bhuíochas a ghabháil leis an bhfeidhmeannas agus leis an bhfoireann a leanann ar aghaidh i gcónaí chun punann d'ardchaighdeán agus atá ag leathnú amach, a sheachadadh le fuinneamh agus cruthaíocht agus é déanta i dtimpeallacht a bhí neamhchinnte maidir le suíomh ar uaire. Tá leas nach beag faighte againn freisin, cé nach léir é i gcónaí, ó thacaíocht an Aire agus oifigeach na Roinne Cumarsáide Mara agus Acmhainní Nadúrtha – tugann siad comhairle tacaíocht agus spreagadh ach ní chuireann siad cosc ar a bhfuil ar siúl. Mar fhocal scoir, ba mhaith liom buíochas a ghabháil le mo chomhbhail ar an mbord a leanann ar aghaidh ag obair go dian, go táirgiúil agus go ceannróideach ar bhealaí éagsúla. Táim fíorbhuíoch dóibh as chomh críonna is atá siad agus as an tacaíocht a thugann siad dom.

**Frank Convery**  
An Cathaoirleach

# Tuarascáil an Phríomhoifigigh Fheidhmeannaigh

Tá an tuarascáil seo ar an dara bliain iomlán de ghníomhaíochtaí an FIE mar Údarás reachtúil. Bhí athrú céime i méid táirgeachta an FIÉ agus thaispeáin roinnt táscairí fhuinnimh inmhathana, treochtaí dearfacha. Níor cuireadh an cháin charbóin a rabhtas ag siúl léi i bhfeidhm, fad is a bhí praghasanna arda agus neamshocraithe mar thréith den bhliain..

Tugadh cothromaíocht isteach i mbeartas fuinnimh de philéar an chomhshaoil ag deireadh na bliana, trí chúraimí a bhain le comórtas agus slándáil i gcúrsaí soláthair. Sa chomhthéacs seo chuir mandáit an FIE chun tósaíocht agus in-athnuaithe fuinnimh a chur chun cinn, bunús ar fáil, do sheachadadh leanúnach tacar láidir cláracha a bhí dearaithe chun comórtas, slándáil soláthair, éifeacht sholáthar fuinnimh ar an timpeallacht agus úsáid a fheabhsú.

Díríonn an clár tionscail ar chomórtas. Chuir an 80 ball den Ghréasán Fuinnimh Thionscail Mhóir (GFTM) (Large Industry Energy Network) a dhéanann suas 42.2% de riachtanas fuinnimh iomlán príomhúla san earnáil tionscail, tuarascáil go raibh 2% méadú ar fheidhmíocht fuinnimh ar fáil. Tugadh aitheantas dóibh siúd a bhain céimíocht amach trí na ghradaim Fhuinnimh Inmhathana, a bhí urraithe ag Soláthar Cuistiméir an BSL. Ainmníodh Martin O'Connor mar Bhainisteoir Fhuinnimh na bliana ar Oileán Beag Pfizer. Bhí 17 gradaim eile ann, ar a n-áitítear seacht gcinn do bhaill an GFTM. Thug an tAonad Tacaíochta um Beartas Staitisticíúil Fuinnimh faoi pháosa tábhachtach oibre ainilísí, nuair a rinne siad measúnú ar nochtadh thionscal na hÉireann do phraghasanna fuinnimh atá ag ardú. Tártaítear níos mó ná 96% de luach iomlán sa tionscaláíocht ag comhlachtaí ina mbíonn costais díreacha fuinnimh níos lú na 4% acu. Is é is cúis leis an suíomh ina fhás luach-curtha leis tionscaláíochta idir 1990 agus 2003 go 228% agus nár méadaigh úsáid fuinnimh fhoriomlán tionscaláíochta ach trí 28% - ná struchtúr tionscailíochta atá ag athrú, infheistíocht i nuatheicneolaíocht agus cleachtas bainistíochta fuinnimh le chéile.

Baineadh siar as an imscaradh amach fuinnimh in-athnuaithe i ngineadh leictreachais le tabhairt isteach státchairde trí mhí ar nascadh gaoithe leis an ngréille náisiúnta. Cuireadh an státchairde i bhfeidhm ag an CER ag moladh an oibrítheora sa scéim tharchuir um Greille Náisiúnta BSL. Díríodh cláracha fuinnimh in-athnuaithe an FIE ar éifeacht socraithe nua margaidh leictreachais ar státchairde ar ghaoth a ardú agus taighde agus forbairt réimse teicneolaíochtaí do tháirgeadh teasa agus chumhachta a chur chun cinn. Chun a mhisean a chomhlíonadh thug an FIE faoi agus rinne siad coimisiúiníú ar roinnt pháosaí taighde maithe poiblí chun an díospóireacht a chur ar an eolas agus cabhrú leis an gclár oibre a chur chun cinn. Airítíodh i measc na bpríomhtháirgeachtaí, dréachtcháipéis Chomhairliúcháin ar mheicníochtaí tacaíochta um fuinnimh in-athnuaithe amach anseo, tuarascáil ghníomhaíochta ghearrthéarmach don Ghrúpa Forbartha Fuinnimh In-athnuaithe agus dhá thuarascáil ghrúpa oibre ar bhithfhuinneamh agus CHP. Tuigeadh ar réimse Uile-Éireanach den Chruinniú Fuinnimh In-athnuaithe ag an Ospidéal Ríoga Kilmainham i nDeireadh Fómhair 2004. Is é an teachtaireacht soiléar a bhí ag teacht ón gcruinniú ná go bhfuil scála astruithe fuinnimh in-athnuaithe sásúil agus de réir acmhainne.

Is é an comhshaoil tógtha is cúis leis an gcuid is mó d'úsáid fuinnimh in Éirinn agus tá cláracha ag FIÉ atá dearaithe chun tabhairt faoina úsáid go tósach. Tá punann leathan de thionscnaimh bhainistíochta fuinnimh, dearadh den scoth agus taispeántas curtha i dtoll a chéile ag clár na hearnála poiblí. Áirítear i measc na gcéad torthaí ón mbiúró bainistíochta fuinnimh biúró amháin ag fógairt sábhálacha bliantúla de 9%. Táthar ag tabhairt faoi fhadhb leanúnach an ghantanas breoslaí a chuireann isteach ar 60,000 teaghlach, tríd an gclár Títhíocht Ioncaim Ísle. I gcomhthéacs praghasanna atá ag ardú,

creideann an FIÉ nach mór an clár seo a thapú ar mhaithe le comháireamh sóisialta. Tá suim nach beag á léiriú ag lucht forbartha i dTeach an Lae Amáraigh. Tá an clár sách leathan i dtéarmaí tíreolaíochta agus tá rannpháirtíocht réigiúin BMW d'ardleibhéal bainte amach aige. Tá líon áirithe forbairtí leagtha amach le cur san áireamh sa tionscnamh "Bailte Cliste" Deisceart/Tuaisceart. Tagann Treoir an AE maidir le Dul Chun Cinn Títhíochta i bhfeidhm i 2006. Tá an tacaíocht teicniúil agus rúnaíochta soláthraithe ag an FIÉ do ghrúpa oibre idir-roinne. Bhí mé sásta ar son an FIÉ gníomhaíocht dréachta a mholadh do na hAíre a bhí freagrach as fuinneamh agus an comhshaoil.

Tá teachtaireachtaí FIÉ chuig tomaltóirí i gcomórtas le réimse leathan ábhar margaidh agus fógraíochta. Tá teagmhálacha rathúla le miondíoltóirí, raidió agus áisiúlachtaí curtha go mór le teachtaireachtaí tomaltóirí. Tá aitheantas tomaltóra agus a gclaonadh chun gníomhaíochta méadaithe ag praghasanna ola agus leictreachais atá ag ardú. Leanann clár oideachais an FIÉ ag athnuachan agus de bhrí go bhfuil sé curtha isteach i gcuiriculum na scoile tá an tionchar atá aige ag fás níos mó. Taispeánann táscairí iompair teip sa ghluaiseacht i dtreo inmhathana in ainneoin an dul chun cinn i gcúrsaí teicneolaíochta.

Leanann an tAonad Tacaíochta um Beartas Fuinnimh Staitisticíúil ar aghaidh ag soláthar léargais trí staitisticí. Tá titim ó 981g/kWh i 990 go 651g/kWh i 2003 i dtáirgeacht CO<sub>2</sub> d'aonad leictreachais feicthe ag lascadh breoslaí, méadú tósach ginte agus infheistíocht i bhfeoras ginte leictreachais nua. Don chéad uair tá níos mó táirgí againn le níos lú fuinnimh agus fós níos lú CO<sub>2</sub>. Tá na buntáistí seo againn ach dá bharr táimid níos mó faoi bhagairt ag praghasanna neamshocraithe an fhoinsé breoslaí seo.

Fuarthas amach go raibh an FIÉ le cur go Dún Dealgan faoi chlár díláraithe an rialtais cé nach raibh sé ar an scéideal ar dtús. Tá an FIÉ mar fheagra ar an rialtas agus ar choimeádáil geallta ag iarraidh béim a chur ar an bpoitéinséal dearfach in aistriú mar sin agus táthar tiomanta do phróiseas teagmhála agus comhairliúcháin, agus táthar ag iarraidh tacaíocht ghníomhach choimeádaithe geallta ar fad a bheadh riachtanach chun é a thabhairt i gcrích. Tá coimeádaithe geallta áitiúla bainteach le forbairt fhís Dhún Dealgain 2020 agus beifear ag súil le tacú ón rialtas. Is é an aidhm fhoriomlán ná eiseamlár de Straitéis Spáis Náisiúnta a imeasadh forbairt réigiúnach agus tras-teorainn, trí mhodhúil fhorbartha inmhathana agus nuálach fuinnimh a chruthú.

Ar deireadh, is mór an dúshlán do shocai na hÉireann inmhathana a neadú. Ba mhaith liom buíochas a ghabháil le baill an bhoird, foireann banaistíochta agus foireann an FIÉ as ucht a n-iarachtaí agus a dtiomantas leanúnach maidir le tuilleadh forbartha ar fhuinneamh inmhathana in Éirinn a neartú. Tá an-suim léirithe ag meáin chumarsáide na hÉireann i bhforbairt fuinnimh inmhathana agus creidim gur chabhraigh é sin le cur chuige atá a shúile amach roimhe ar fhorbairt ár n-acmhainní nadúrtha.

**David Taylor**

An Príomhfheidhmeannach

# Baill an Bhoird

Ceapadh an chéad Bbord de FIÉ i 2002 faoi fhorálacha an Achta um Fhuinneamh Inmharthana, 2002. Tá sé déanta suas de dhá bhall déag san iomlán, an Cathaoirleach san áireamh. Ní raibh aon athrú ar an mBord i 2004. Is iad seo a leanas baill an Bhoird 31 Mí na Nollag 2004:



Is **Frank Convery** atá mar Chathaoirleach an FIÉ agus mar Ollamh Iontaobhas Oidhreachta na Staidéar Comhshaoil, Coláiste na hOllscoile, Baile Átha Cliath. Roimhe seo bhí sé mar ollamh taighde san Institiúid um Thaighde Eacnamaíochta agus Sóisialta, Baile Átha Cliath, agus mar Ollamh Comhlach ar Eacnamaíocht Acmhainní Nádúrtha in Ollscoil Duke i Carolina Thuaidh.



Is forbróir maoine, ceantálaí agus suirbhéir é **John Buckley** a bhfuil taithí cúig bliana is fiche aige ar chúrsaí gnó. Tá John mar bhall de Bhoird Cheantálaithe John Buckley (John Buckley Auctioneers), Chomhlacht Rásaíochta Chill Airne (Killarney Race Company) agus de Choiste Comhairleach na Gníomhaireachta um Chaomhnú Comhshaoil.



Tá **Gerry Cahill** ina Ardstiúrthóir ar Ailtirí Gerry Cahill (Gerry Cahill Architects) agus ina Chomhstiúrthóir ar Thionscail Uirbeacha Teo (Urban Projects Ltd.). Tá sé páirteach ó na 1980idí i ndearadh athnuachana uirbí agus thionscail tithíochta sóisialta i gcathair Bhaile Átha Cliath agus i gcontae Átha Cliath. Sula raibh sé ar Bbord FIÉ bhí sé mar Stiúrthóir ar Ghníomhaireacht Fuinnimh Teo (Energy Agency Ltd.). Tá Gerry ag teagasc deartha agus teicneolaíochta i Scoil na hAiltireachta i gColáiste na hOllscoile, Baile Átha Cliath ó 1979.



Is é **Martin Finucane** an Príomhoifigeach i Rannóg an Fhuinnimh Inmharthana sa Roinn Cumarsáide, Mara agus Acmhainní Nádúrtha mar a n-áirítear lena fhreagrachtaí saincheisteanna athraithe aeráide san earnáil fuinnimh, fuinneamh in-athnuaite a chur chun cinn agus polasaí tionsaíochta fuinnimh deiridh. D'oibrigh sé roimhe seo i réimse leasa shóisialta na seirbhíse poiblí.



Is comhairleoir sábháilteachta agus comhshaoil é **Bill Flood**, agus roimhe seo bhí sé ina Bhainisteoir ar Thionscail Aoiligh na hÉireann (Irish Fertiliser Industries) san Inbhear Mór mar ar oibrigh sé ar feadh seacht mbliana dhéag. Tá taithí maith aige ar dhéantúsaíocht phróisis dianfhuinnimh, agus tá suim ar leith aige in iniúchadh feidhmíochta, i dtagarmharcáil agus i gcomhaontuithe idirbheartaithe.



Tá **Vicky Heslop** páirteach i bhforbairt inmharthana a chur chun cinn ó 1986. Tá sí mar Ardstiúrthóir ar Methan O Gen Teo., cuideachta speisialtóireachta chomhairliúcháin agus fhorbartha bhithgháis, ó 1994. Tá Vicky mar Leas-Uachtarán agus mar bhunbhall de Chumann Bithfhuinnimh na hÉireann (Irish Bioenergy Association).



Is é **John McMullan** Stiúrthóir Feidhmeannach na carthanachta Teach Bryson (Bryson House) i dTuaisceart Éireann, atá chun tosaigh maidir le forbairt bheartas tionsaíochta fuinnimh i dTuaisceart Éireann. Tá John ina Chathaoirleach freisin ar Choiste Fhorbairt Inmharthana Ollscoil Uladh, agus ina Leas-Chathaoirleach ar thionscadal Chathracha Sláintiúla Bhéal Feirste (Belfast Healty Cities). Tá John ina bhall d'Fhóram Chreidiúint Chánach Líonta Talún na Ríochta Aontaithe.



Is é **David Naughton** an tOifigeach Tionsclaíochta Náisiúnta leis an gCeardchumann Teicniúil, Innealtóireachta agus Leictreachais. Tá freagracht náisiúnta ar David as Bord Soláthair an Leictreachais agus as an gComhchoiste Náisiúnta Tionsclaíochta don Tionscal Conraitheoireachta Leictreachais.



Is é **Michael Nicholson** Stiúrthóir na Seirbhísí Comhshaoil i gComhairle Contae Chill Mhantáin. Roimhe seo d'oibrigh sé le Comhairlí Contae na Mí agus Liatroma, le Bardas Chorcaí agus le Comhairlí Baile Bhaile Átha Troim agus an Inbhir Mhóir. Bhí sé ina Stiúrthóir roimhe seo freisin ar Údarás Réigiúnach an Oirthir Láir. Tá spéis mhór ag Michael i gcúrsaí comhshaoil, forbairt inmharthana go háirithe.



Tá **Claire O'Connor** ina Stiúrthóir ar an Údarás Náisiúnta Míchumais. Is Stiúrthóir í de Bhanc Bhanaí Cumhdaithe Iarthar LB (West LB Covered Bond Bank), agus bhí sí mar stiúrthóir ar feadh 12 bliain ar Bhanc ICC agus mar Chathaoirleach ar Choiste Iniúchta ICC. Is iar-Phríomhoifigeach Feidhmeannach í ar an gCumann Tráchtála Meiriceánach agus roimhe sin bhí sí mar Cheannasaí Airgeadais Chorpáraidigh i gcuideachta theoranta poiblí Bheatha na hÉireann.



Is Innealtóir Sibhialta é **Pat O'Malley** a bhfuil taithí leathan aige i bhforbairt mhaoiné agus i mbainistíocht tionscadal. D'oibrigh Pat mar Chomhairleoir Speisialta don Aire Fuinnimh (1989/1992) agus is iar-urllabhra de chuid an Fhreasúra é ar Fhuinneamh, Iompar agus Cumarsáid (Dáil Éireann 1987/1989)



Is é **David Taylor** Príomhoifigeach Feidhmeannach FIÉ. Sular ceapadh é, ba é David Stiúrthóir Lárionad Fuinnimh na hÉireann. Cháiligh sé mar Innealtóir Ceimiceach agus tá Máistreacht Eolaíochta i mBainistíocht aige ó Choláiste na Tríonóide, Baile Átha Cliath. Bíonn sé gníomhach i gcúrsaí fuinnimh na hEorpa agus is ball é de Choiste na Gníomhaireachta Idirnáisiúnta Fuinnimh (GIF) (International Energy Agency) ar Thaighde agus Teicneolaíocht Fuinnimh.

# Coistí an Bhoird

## COISTÍ AN BHOIRD

Déanann Coiste nó Grúpa Oibre cuid mhór d'obair shonrach an Bhoird sa chéad dul síos. Bíonn na Coistí agus na Grúpaí Oibre déanta suas de bhaill den Bhord, de Lucht Bainistíochta FIÉ, agus de shaineolaithe seachtracha.

Tá dhá choiste agus grúpa oibre amháin ag an mBord.

### Coistí Boird

Tá an **Coiste Athuimhrithe** (Remuneration Committee) freagrach as:

- Na téarmaí agus coinníollacha a bhíonn i gceist agus an Príomhoifigeach Feidhmeannach in oifig a mholadh don Bhord
- Táscairí feidhmíochta oiriúnacha a bhunú i gcomhthéacs Bhónas I gCoibhneas le Feidhmíocht an Phríomhoifigigh Fheidhmeannaigh
- Iocaíocht Bhónas i gCoibhneas le Feidhmíocht an Phríomhoifigigh Fheidhmeannaigh a mholadh don Bhord
- Athbhreithniú a dhéanamh ar Phlean Gníomhaíochta an Údarás maidir leis an gcomhaontú um Dhul Chun Cinn Inmharthana.

Bhí an coiste déanta suas de na daoine seo a leanas 31 Nollaig 2004:

- Frank Convery (Cathaoirleach)
- Martin Finucane
- Bill Flood
- David Naughton

Tá an **Coiste Iniúchta** (Audit Committee) freagrach as:

- Athbhreithniú a dhéanamh ar na Ráitis Bhliantúla Airgeadais agus ar ráitis fhoilsithe eile agus ar eolas eile a bhain le cúrsaí rialaithe agus airgeadais ar son an Bhoird
- A chinntiú nach mbíonn aon chosc le scóip an iniúchta agus as athbhreithniú a dhéanamh ar ghníomhaíochtaí, ar fhírí, ar chonclúidí agus ar mholtaí an iniúcháora
- Athbhreithniú a dhéanamh ar an dóigh a gcinntíonn lucht bainistíochta go bhfuil córas sásúil, éifeachtach rialúchán inmheánach airgeadais, oibríochtúil agus comhlíonta ann
- Clár oibre atá beartaithe ag an Iniúcháir Inmheánach a fhaomhadh agus a athbhreithniú

Bhí an coiste déanta suas de na daoine seo a leanas 31 Nollaig 2004:

- Pat O'Malley [Cathaoirleach]
- Michael Nicholson
- Claire O'Connor

Is grúpa oibre é an **Grúpa Oibre um Beartas agus Nósanna Imeachta** (Policies and Procedures Working Group) de chuid Bhord FIÉ a mhaireann ar feadh tréimhse socráithe agus atá déanta suas de dhá shraith, sraith na mbeartas agus sraith na nósanna imeachta.

Soláthraíonn sraith na mBeartas Fuinnimh comhairle do FIÉ maidir le forbairt bheartas fuinnimh, luacháil chlár agus fheidhmíochta ar son an Bhoird.

Bhí sé déanta suas de na daoine seo a leanas 31 Nollaig 2004:

- Vicky Heslop [Cathaoirleach]
- Gerry Cahill
- Martin Finucane
- David Taylor

Soláthraíonn an **sraith um Próisis agus Nósanna Imeachta Eagraíochtúla** comhairle do FIÉ maidir le:

- Réimsí de phróisis eagraíochtúla, agus gnéithe de phróisis agus nósanna imeachta nach bhfuil clúdaithe ag an gCoiste Iniúchta, ar son an Bhoird.
- Gnéithe de phróisis agus nósanna imeachta lena n-áirítear foirgnimh, rialú, beartais Acmhainní Daonna, cumarsáid sheachtrach, seirbhís do chustaiméirí, próiseas na ndéontas agus tarmligeán cumhachtaí, bainistíocht eolais, bainistíocht riosca, agus comhlíonadh reachtaíochta.

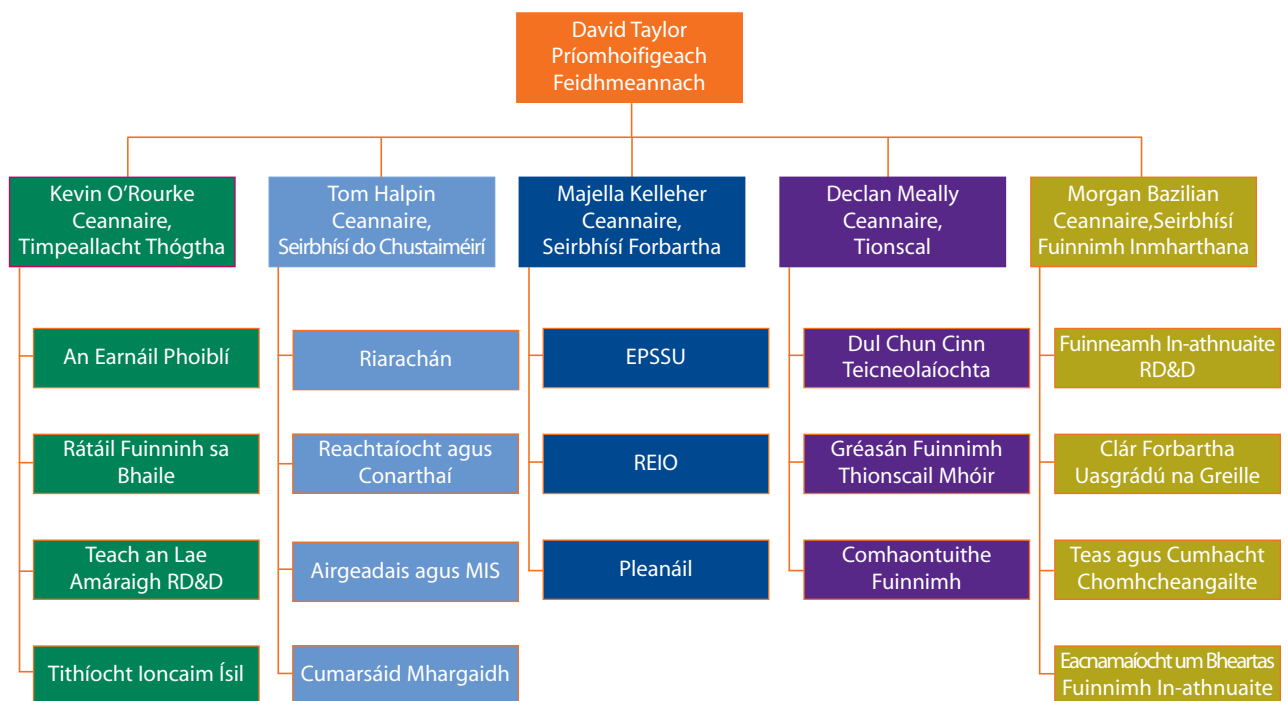
Bhí sé déanta suas de na daoine seo a leanas 31 Nollaig 2004:

- John Mc Mullan [Cathaoirleach]
- John Buckley
- Bill Flood
- David Taylor

# Cláir i 2004

Tá sé mar chúram ar FIÉ cláir a fhorbairt agus a chur i ngníomh chun tíosáocht fuinnimh agus seachadadh fuinnimh in-athnuaite a chumasú. Tá sé eagrúithe i gcúig roin agus cuireann gach ceann acu na cláir sin i ngníomh.

Tá liosta iomlán de na cláracha, briste síos roinn ar roinn, imlínithe anseo thíos:



# Clár Rátála Fuinnimh sa Bhaile/ Treoir um Fheidhmíocht i bhfoirgintí

Is annamh a bhíonn tiosaíocht fuinnimh tí sofheicthe ag díoltóirí, ceannaitheoirí nó tionóntaí. Tabharfaidh an clár seo faoi riachtanas do chóras cuimsitheach Rátála Fuinnimh sa Bhaile, a bheidh aitheanta go náisiúnta, agus a mbeidh mar aidhm aige gné shoiléir, thábhachtach i gcinntí maidir le ceannacht tithe agus athchóirithe a dhéanamh de thiosaíocht fuinnimh i dtithe.

Spreagfaidh sé úinéirí tithe agus lucht infheistíochta na dóigheanna is éifeachtúla chun feidhmíocht fuinnimh ina dtithe a aithint agus a fheabhsú go córasach.

Tá an clár dírithe go príomh ar an Treoir um Fheidhmíocht Fuinnimh i bhfoirgintí (TFFF) a chur i bhfeidhm go rathúil.

Buiséad i 2004: €0.03 milliún

## Dul Chun Cinn i 2004

Sa bhliain 2004, choimisiúnaigh an FIÉ líon staidéar straitéiseach chun an chur i bhfeidhm molta na Treorach a chur ar an eolas. Is iad na réimsí a clúdaiodh:

- > Suirbhéireacht agus áireamh chórasacha bogearraí
- > Riarachán agus bainistíocht chórasacha bogearraí
- > Comhlíonadh dualgaisí maidir le héifeacht chóras teasa/gaileadáin

Le linn 2004, thug foireann an FIÉ líon mór bronnadh poiblí a raibh mar aidhm acu feacht ar an TFFF agus a impleachtaí a mhéadú. Tugadh na bronnta do Chomhairle Cathrach Bhaile Átha Cliath, Comhairle Contae Dheisceart Bhaile Átha Cliath, EuróACE, Oifig na nOibríthe Poiblí, agus an CIBSE srl.

Ar son an Ghrúpa Oibre, a bunaíodh chun an Treoir a chur i bhfeidhm, bhí ról gníomhach ag an FIÉ i líon mór cruinnithe náisiúnta agus idirnáisiúnta, a tionóladh chun an EPBD a phlé. Áiríodh i measc iad seo Coiste Bainistíochta Éilimh Fuinnimh Thionólta Choimisiúin na hEorpa.

Leanann an FIÉ ar aghaidh le bheith rannpháirteach i dtionscadal Gníomhaíochta Chomheagraithe ar an EPBD, taobh istigh d'Fhuinneamh éirimiúil an AE do chlár na hEorpa. Faoi láthair, tá 23 Ballstát rannpháirteach sa tionscadal a sholáthraíonn ardán tábhachtach chun tuairimí agus eolas a mhalairt maidir le cur i bhfeidhm na Treorach.

## TREOIR UM FHEIDHMÍOCHT FUINNIMH I BHFOIRGINTÍ AN AE

### Cúlra

Tugann taighde de chuid an AE le fios go bhféadfaí astuithe CO<sub>2</sub> ó úsáid fuinnimh i bhfoirgintí a laghdú 20% trí theicneolaíochtaí agus cleachtais fheabhsaithe. Tá Treoir um Fheidhmíocht Fuinnimh i bhfoirgintí (TFFF) an AE mar mhórfhreagra beartais ar an dúshlán seo agus tá réimse forálacha ann atá dírithe ar dhul chun cinn fuinnimh i bhfoirgintí, idir chónaithe agus neamhchónaithe agus cinn nua agus cinn atá ann cheana féin.

Faoin Treoir ní mór Teastas feidhmíochta fuinnimh agus tuarascáil chomhairleach a sholáthar ag úinéir an fhoirgnimh nuair a thógtar, a dhíoltar nó a ligtear foirgneamh amach ar cíós. In Éirinn rachaidh an Treoir seo i bhfeidhm ar 150,000 idirbhearta in aghaidh na bliana san earnáil tithíochta amháin.

Ní mór go mbeadh feabhasaithe costas-éifeachtach in éineacht leis na rátáil fuinnimh. Tá sé ag teastáil ón TFFF freisin, go dtéitear i mbun gnímh chun córais tíosacht gailearán agus aer-oiriúnaithe a fheabhsú.

### Plean gníomhaíochta

Cuireadh grúpa oibre ar bun i 2003 chun cur i bhfeidhm an TFFF in Éirinn a phleanáil agus a fhorbheathnú. Tá an grúpa déanta suas d'oifigigh shinsearacha ón Roinn Comhshaoil, Oidhreacht agus Rialtas Áitiúil (RCORA), an Roinn Cumarsáide, Mara, agus Acmhainní Nádúrtha (TCMAN), agus Fuinneamh Inmharthana Éireann (FIÉ).

Tá plean dréachta ullmhaithe ag an nGrúpa, a leagann amach na socruithe náisiúnta atá molta, na tascanna forbartha, freagrachtaí agus scálaí ama a bheidh ag teastáil ionas gur féidir cur i bhfeidhm iomlán an TFFF a bhaint amach i slí atá inoibrítheach agus costas-éifeachtach.

Tá príomhról glactha ag an FIÉ maidir leis an bplean a ullmhú a fhoilseofar mar chuid de phróiseas poiblí chomhairliúcháin. Foilseofar plean gníomhaíochta athbhreithnithe, ag cur san áireamh na tuairimí go léir a fuarthas ó pháirtithe ábhartha, i 2005.

Tá an FIÉ ag imirt príomhról maidir le maoiniú agus tacú le forbairt módhanna praiticiúla atá ag teastáil chun an TFFF a chur i bhfeidhm ar a n-áirítear bunachar sonraí náisiúnta, riarachán, bogearraí, traenáil, dearbhú cáilíochta agus dul chun cinn.



# Clár Taighde agus Forbartha Theach an Lae Amáraigh

Cruthaítear 25% d'astuithe CO<sub>2</sub> a bhaineann le húsáid fuinnimh in Éirinn san earnáil chónaithe. Is éard is aidhm leis an gclár seo ná feidhmíocht fhuinnimh feabhsaithe a thapú i dtithe nua agus i margadh feabhsaithe stoc tithe araon in Éirinn.

I measc eilimintí an chláir tá:

- > Taighde um maitheas don phobal
- > Múnlaí de thionscadail taispeántais,
- > Taighde agus forbairt táirgí, chóras agus seirbhísí

Buiséid i 2004: €0.99 milliún

## Dul Chun Cinn i 2004

Chomh maith le hobair chláir leanúnach, faomhadh 28 tionscadal do mhaoiniú i réimsí an taighde agus na forbartha, an chomhoibríthe idirnáisiúnta, agus an taighde um maitheas don phobal. Ciallaíonn sé seo €5 milliún i dtiomantais mhaoinithe nua ina iomláine. I measc na dtionscadal ar fiú aird a dhíriú orthu tá tionscadal taighde agus forbartha le Century Homes (féach Cás-Staidéar) agus staidéar a coimisiúnaíodh chun réimse na roghanna um uisce te sa bhaile i dtithíocht na hÉireann a mheasúnú. Seoladh tionscnamh traenála dírithe ar thionscal théimh títhíochta na hÉireann agus dearaithe chun caighdeánacha cáiliúla a chur chun cinn. (féach cás staidéir)

Áirítear i measc na teicneolaíochtaí atá in úsáid sna tionscadail taisteántais títhíochta 1670 a faomhadh go dtí deireadh 2004:

- > Gaileadáin comhdhlúthaithe (1,153 baile)
- > Grianthéitheoireacht uisce (300 baile)
- > Aeráil ón teas (176 baile)
- > pumpa teasa ó fhoinsé talon (128 baile)
- > Gaileadáin mhillíní adhmaid (50 baile)

## TIONSCNAMH NUA CHUN CAIGHDEÁIN CÁILÍOCHTA AGUS TÍOSAÍOCHT FHUINNIMH I DTIONSCAL TEASA SA BHAILE I DTÍTHÍOCHT NA HÉIREANN A CHUR CHUN CINN

Sheol an FIÉ tionscnamh nua traenála i 2004 chun caighdeáin cáiliúla agus tíosaíocht fhuinnimh a chur chun cinn i dtionscal teasa sa bhaile i dtíthíocht na hÉireann. Bhí an tionscnamh dírithe ar thionscal teasa na hÉireann agus deartha chun tacú le forbairt scéimeanna insuiteoir cláraithe agus teicneolaí seirbhíse.

Faoi láthair níl mórán acmhainní ar fáil chun cabhrú le tomaltóirí agus speisialtóirí d'insuiteoirí chórais teasa cháilíochta a aithint. Mar thoradh air sin, bíonn deacrachtaí os comhair tomaltóirí maidir le cinntí thábhachtacha ceannaithe a dhéanamh, agus ag an am céanna, bíonn deacrachtaí ag insuiteoirí ghairmiúla maidir le córais den chleachtas is fearr a dhíol.

Ina inniúlacht mar an údarás um fhuinneamh náisiúnta, tá an FIÉ ag tacú le caighdeáin traenála tionscal treoraithe agus Cóid Chleachtas do shuiteálaithe chórais téimh. Foin tionscnamh nua, beidh ceann de na céad scéim bainteach le maoiniú a chur ar fáil do thraenáil teicneoirí chórais téimh ola de réir na scéime bainistithe ag an gCumann Teicniúil Ola (CTO). Beidh deiseanna maoinithe ar fáil d'institiúidí bunaithe in Éirinn ag a bhfuil cumais traenála, ar a n-áirítear iad siúd atá bainteach leis an earnáil oideachais agus traenála, sa tionscal príobháideach, agus/nó frontair idir an dá pháirtí.

Is cuid den Chlár tionscnamh nua cáilíochta do Ghréasán Foirgnimh Fhuinnimh Inmharthana (GFFI) a chuireann chun cinn go nglacfaí go forleathan le cleachtas pleanáil fhuinnimh inmharthana i bhfoirgnintí.

# Tithíocht Ioncain Ísil

Meastar nach mbíonn sé d'acmhainn ag 62,000 teaghlach in Éirinn íoc as breoslaí i rith an ama agus go mbaineann an rud céanna i gceist le suas le 227,000 teaghlach ó am go chéile.

Cuireann an clár seo le bunú agus le cur i ngníomh phlean náisiúnta gníomhaíochta chun aghaidh a thabhairt ar bhochtaineacht bhreosla i dtithe ina bhfuil daoine le hioncam íseal.

I measc eilimintí an chláir tá:

- > Íosaíocht fhuinnimh i dtithe ina mbíonn daoine le hioncam íseal ina gcónaí a fheabhsú
- > Inniúlacht eagraíochtaí in Éirinn toisí den chineál sin a chur i bhfeidhm
- > Tacaíocht don ghníomhaíocht seo trí chlár eolais agus feasachta ardaíthe, agus trí chomhpháirtíocht a thógáil ag leibhéal áitiúil, réigiúnach agus náisiúnta.

Buiséad 2004: €0.94 milliún

## Dul Chun Cinn i 2004

Bhí feabhasaithe maidir le Gníomhaireacht Fhuinnimh Bainte amach i 6,815 teach faoi Nollaig 2004.

In Eanáir 2004, sheol FIÉ "Athbhreithniú ar bhochtaineacht bhreosla agus tithíocht ioncain ísil" ag seimneár ina raibh líon mór coimeádaithe Geallta lena n-áirítear na ranna agus na ngníomhaireachtaí rialtais eile chomh maith le hionadaithe ón earnáil phobail agus dheonach.

Le linn an tsamhraidh 2004, cheap an FIÉ beirt chonarthóir chun feidhmíocht Clár Íoc Amach Chiste a sheachadaíonn insealbhú mhodhanna tíosaíochta fhuinnimh i dtithe ina mbíonn teaghlach le hioncam íseal ina gcónaí a bhainistiú. Cuireadh ainm nua ar an gClár Íoc Amach Chiste mar atá Scéim Thithe Níos Teo.

Faomhadh dhá ghníomhaíocht insealbaithe pobal -bhunaithe eile i Loch Garmáin agus in Iniseoin Co. Dhún na nGall le haghaidh maoinithe. Ocht ngníomhaíocht insealbaithe anois atá ag feidhmiú faoin scéim: dhá cheann i mBaile Átha Cliath; ceann amháin i gcathair Chorcaigh agus i gcathair Luimnigh, Trá lí agus Loch Garmáin agus dhá cheann i nDún na nGall.

Thionscain an FIÉ, ag deireadh 2004, tionscadal príobháideach agus is tríd an tionscadal seo ar a mbunófar múnla chun caidreamh a bhunú le conarthóirí insealbaithe. Tá níos mó leathnú amach ar phlean forbartha Scéim Tithíochtaí Níos Teo i gceist do 2005 le fócas ar insealbaitheoirí pobal- bhunaithe i gcónaí.

## MEITHEAL FORBARTHA NA GAELTACHTA TEO (MFG)

Bunaíodh MFG, cuideachta forbartha poiblí bunaithe i nGaeltacht Dhún na nGall i 1990 chun an clár Leader 1 a sheachadadh i gceantair Gaeltachta ar fud na tíre. Sa bhliain 1996 rinneadh conradh le MFG chun an clár Cur san Áireamh Sóisialta um Fhorbairt Áitiúil, a raibh laghdú leibhéil bhochtanaís i gceantair áitiúla thairmliogthe mar phríomhchuspóir aige.

San Fómhair 2003 chuir MFG iarratas isteach le haghaidh maoinithe faoin ainm nua " FIÉ ScéimThithe Níos Teo" chun cuidiú leis seirbhís theas díonta do theaghlach ioncain ísil i nGaeltacht Dhún na nGall a chur ar bun. Faoi chomhaontú trí bliana, tá FIÉ ag soláthar maoinithe 50,000 in aghaidh na bliana. Tá MFG ag cur an comhordaithóir ar fáil agus tá FÁS ag cur maoiniú fóirne trína scéim Fostaíochta Pobail agus Tionacnaimh Phostanna, chomh maith le maoiniú do thraenáil fóirne ar fáil.

Thosaigh MFG ag feidhmiú i Meán Fómhair agus anois tá siad ag soláthar teasdíonta chuasáin bhallaí agus áiléar, seirbhísí chun tithe a dhéanamh díonmhar ar sheidéáin, seaicéid shorcóirí uisce the, lampaí fuinnimh ísil agus comhairle fuinnimh d'úinéirí tithe d'ioncam íseal i nGaeltacht Dhún na nGall. Cuirtear costas beag i bhfeidhm don tseirbhís, ach is féidir é a chealú má tá sé seo ag teastáil.

Le linn 2004, d'fheabhsaigh MFG tíosaíocht fhuinnimh i níos mó ná 100 tithe. Tá an tionscadal seo ag cur fostaíocht agus traenáil ar fáil do thriúr daoine, iad go léir difhostaithe ar an bhfadthearma roimhe sin. Le linn na chéad bliana a bhí sé ag feidhmiú, d'éirigh le MFG táirgiúlacht mhaith agus ceardaíocht d'ardchaighdeán a bhaint amach.

D'ainneoin infheistíocht bheag go leor maidir leis an tseirbhís a fhoilsiú, tá an-tóir uirthi agus anois tá liosta fada feithimh ag MFG. Le linn 2005, tá pleananna ag an gcuideachta obair a chur i ngníomh i níos mó ná 100 tithe ar son an FIÉ, lena n-áirítear cuid de na tithe ar na hioleáin amach ó chósta Dhún na nGall.

# An Earnáil Phoiblí

Mhol an Páipéar Glas um Fuinneamh Inmharthana gur cheart go mbeadh an earnáil poiblí ina heiseamlár den chleachtas is fearr i dtíosaíocht fhuinnimh. Éascaíonn an clár seo feabhsúcháin suntasacha i dtíosaíocht fhuinnimh i bhfoirgintí na hearnála poiblí.

Éascaíonn sé feabhsúcháin suntasacha tíosaíochta fuinnimh maidir le dearadh agus sonraíocht i dtógáil as an nua agus athchóirithe a sheachadadh a bhfuil tuairim is €1.9 billiún leithdháilte dó faoin bPlean Náisiúnta Forbartha.

I measc eilimintí an chláir tá:

- > Staidéir Dheartha chun deiseanna nua do réitigh atá tíosach ar fhuinneamh in athchóiriú agus i bhfoirgníocht a léiriú
- > Múnlaí de réitigh chun tacú le hinfheistíocht nua i réitigh atá níos tíosaí ar fhuinneamh
- > Feidhmiúcháin bhiúró um bainistíocht fuinnimh chun soláthar conarthaí rialú agus bainistíocht fuinnimh d'fhoirgintí na hearnála poiblí a spreagadh

Buiséad 2004 :€1.99 milliún

## Dul Chun Cinn i 2004

Tar éis athbhreithnithe den chlár tionscadail a fuair tacaíocht chomh maith le hathbhreithniú de chlár an bhuiséid, rinneadh cinneadh an Scéim Tacaíochta Staidéir Dheartha ( d'iarthóirí indibhidiúla) agus an Scéim Tacaíochta Infheistíochta Réitigh Eiseamlárnach a dhúnadh. Tá an scéim fhoirmiúil ar oscailt fós d'iarthóirí aicmeach. Sa tréimhse go dtí 2004 cuireadh 75 staidéar deartha agus 49 múnla de réitigh i gcrích. Tá siad seo go léir ag feidhmiú go hiomlán mar thionscadail taispeántais i bhfoirgintí poiblí.

Tá obair ar siúl ar: mheastúchán píolótach ar dheich múnla réitigh comhlánaithe, táscairí feidhmíochta oiriúnacha le haghaidh foirgintí a fhorbairt in Éirinn, meastúchán ar theicneolaíochtaí charbóin ísil don fho-earnáil agus táirgíocht treoirleabhar bainistíochta fuinnimh i bhfoirgintí.

Tá dhá bhiúró ag feidhmiú go hiomlán anois. Tá Oifig na nOibreacha Poiblí mar óstach ar an gcéad cheann a chlúdaíonn breis is 150 de na foirgnimh is mó in eastát oifigí an rialtais lárnaigh. Seoladh "e3" go hoifigiúil i mBealtaine 2004 ina n-áirítear UCD, Coláiste na Tríonóide, Baile Átha Cliath, Instiúid Teicneolaíochta Bhaile Átha Cliath agus Ollscoil Chathair Bhaile Átha Cliath (féach cás-staidéar). Tá leas á bhaint ag na coláistí cheana ó laghdaithe in úsáid fuinnimh agus costais mar thoradh ar idirghabháil bhiúró.

D'fhaomh an FIÉ iarratas a cuireadh isteach ag an Roinn Sláinte agus Leanaí le haghaidh biúró lena gcorpaítear na cúig ospidéal teagaisc. Is iad seo cuid de na húsáiditheoirí fhuinnimh is mó in earnáil sláinte na hÉireann.

## E3 – BIÚRÓ UM BHAINISTÍOCHT FHUINNIMH I GCOLÁISTÍ TRÍÚ LEIBHÉAL

Tá ceithre choláiste tríú leibhéal, Instiúid teicneolaíochta Bhaile Átha Cliath, Ollscoil na hÉireann Baile Átha Cliath, Coláiste na Tríonóide, Baile Átha Cliath, agus Ollscoil na hÉireann Baile Átha Cliath aontaithe le chéile chun e3 a chur ar bun – an Biúró Tríú Leibhéal um Bainistíocht fhuinnimh – chun iarracht a dhéanamh úsáid fuinnimh bhliantúla an choláiste a laghdú. Cuireadh tacaíocht don bhiúró, a seoladh go hoifigiúil i mBealtaine 2004, ar fáil ag dhá scéim chlár na hearnála poiblí de chuid an FIÉ. Thug an Múnla Scéim Tacaíochta um Infheistíocht Réitigh maoiniú do chur i bhfeidhm an chóras monatóireachta fuinnimh i bhfoirgintí a bhí idirlíon bunaithe fad is a bhí an biúró é féin maoinithe faoin Scéim Biúró Bainistíochta Fuinnimh.

Faoi threoir an bhiúró, rinneadh sraith iniúchtaí fhuinnimh ar gach campas ollscoile. Is é aidhm na n-iniúchtaí conas a baineadh úsáid as fuinneamh i ngach foirgneamh; céard iad na modhanna sábhála fuinnimh a d'fhéadfaí a chur i bhfeidhm; agus céard iad na spriocanna a d'fhéadfaí a leagan síos le feidhmíocht amach anseo. Thaispeáin na hiniúchtaí go raibh an-scóip ann chun cleachtais tíosa atá ann faoi láthair a fheabhsú. Shainaithin an cuideachta an réimse de shábháil fhuinnimh a d'fhéadfadh teacht as insealbhaithe teicneolaíochtaí fearais agus rialacháin nua. Is éard is toradh leis seo ná go bhfuil infheistíocht déanta ag cuid de na coláistí i roinnt bhealaí mar atá rialacháin agus solaisí feabhsaithe.

Tá torthaí na n-iniúchtaí seo chomh maith le cinn eile scaipthe ag an mbiúró trí chláracha traenála agus ag cruinnithe dírithe d'fhóirne lena mbaineann ag na ceithre coláistí. Chomh maith leis sin cuirtear chun cinn saincheisteanna a bhaineann le feachtas fuinnimh ar an suíomh do lucht éisteachta níos leithne trí phóstaear ghreamaitheoirí agus chártaí glao a scaipeadh.

Is é aidhm an bhiúró 10% lacáirse in úsáid fuinnimh i 30 phríomhfhoirgneamh a bhaint amach taobh istigh de thréimhse thrí bliana. Ag deireadh na trí bliain meastar go mbeidh an choigilt fhuinnimh ag tuairim is €315,000 gach bliain. Beidh iadhdú 3,230 tonna astuithe CO<sub>2</sub> da bharr.

# Eolas don Thomhaltóir

Cruthaítear aon cheathrú d'astuithe CO<sub>2</sub> a bhaineann le húsáid fuinnimh in Éirinn san earnáil chónaithe. Is tréith í den earnáil na leibhéil réasúnta arda feasachta maidir le toisí bunúsacha tíosáochta Fuinnimh atá ann.

Go ginearálta, áfach, níl tomhaltóirí eolach mórán ar na tionchair thimpeallachta a bhaineann le húsáid fuinnimh nó ar oibleagáidí idirnáisiúnta na hÉireann faoi Chomhaontú Kyoto agus Treoracha éagsúla an AE. Ar an gcaoi chéanna, cuireann tomhaltóirí in iúl go bhfuil siad toilteanach agus gur mian leo a bheith níos tíosáí ar fhuinneamh, ach chuige sin, ní thagann gníomhaíocht.

Is éard atá mar aidhm ag an gclár eolais do thomhaltóirí ná an pobal a thabhairt chun cinn i dtreo leibhéal ardaithe feasachta agus gníomhaíochta i bhfabhar tuilleadh iompraíochta um fhuinneamh inmharthana. Áirítear leis an gclár:

- > Seachtain Eolais Fhuinnimh
- > Eolas agus comhairle trí bhróisiúir, beolíne teileafóin agus taispeántais
- > Gníomhaíochtaí iompraíocht thomhaltóirí
- > Tionscnaimh i scoileanna chun luathmhúnlú iompraíochta agus meoin agus dearcadh fadtéarmach a chothú.

Buiséad 2004: €0.7 milliún

## Dul Chun Cinn i 2004

Is príomhthionscnamh é Seachtain Eolais Fhuinnimh atá dírithe ar lucht tithíochta go háirithe. Teas inmharthana ba théama don chlár 2004 agus iarradh go láidir ar thomhaltóirí teirmeastait téimh a íslíú 1%, a d'fhéadfadh coigilt 10% ar bhíllí téimh a dhéanamh.

Bhí seastán ag FIÉ ag Taispeántas Tithe Earraigh agus Gairdíní, a bhí ar siúl ag an RDS i Márta 2004.

Ghlac 20 bailte móra agus cathracha ar fud na hÉireann páirt sa Lá Náisiúnta Gan Caranna a bhí ar siúl ar an 22 Meán Fómhair 2004. Bhí líon mór scoileanna ag glacadh páirt i gcomórtas do bhunscoileanna a bhain leis an lá, an chéad cheann dá shórt eagraithe ag an FIÉ.

Rinneadh forbairt fréamhshamhail ar ionad gréasáin "White Site" i 2004 freisin, a ligfidh do thomhaltóirí siopadóireacht fuinneoige a dhéanamh d'fhearais tíosach fuinnimh ar líne agus iad a chur i gcomparáid le saincheisteanna agus praghasanna táirgí. Beidh an láithreán comhlánaithe le linn 2005.

Dhírigh an clár do scoileanna níos mó ar ghrúpaí a bhí níos óige le forbairt an leabhair oibre Guzzler, a dhíríonn ar an aoisghrúpa 5-7.

## ACMHAINNÍ GUZZLER DO BHUNSCOILEANNA

### Cúlra

Rinneadh ábhar éigeantach den eolaíocht do dhaltai de gach aois nuair a tugadh isteach an Curaclum nua Eolaíochta do bhunscoileanna i 2003. Thug an FIÉ faoin dúslán seo trí acmhainní nua a fhorbairt a bhí dírithe ar léibhéal sóisearach na mbunscoileanna. Tar éis dul i gcomhairle le roinnt múinteoirí, cuireadh an carachtar agus na hacmhainní Guzzler ar fáil agus dáileadh iad ar scoileanna ar fud na tíre.

### Leabhair Guzzler

Tar éis dul i mbun cainteanna le múinteoirí agus daltaí bhí sé soiléar go raibh formáid an leabhair mhóir an-éifeachtach ag an leibhéal seo. Cuireadh "Guzzler's Big Book on Energy", leabhar scéalaíochta datha A3 le chéile. Is fathach cáirdiúil é Guzzler, an carachtar lánach sa scéal, a úsáideann an iomarca fuinnimh. Tríd an scéal, múineann úinéir Guzzler, cailín óg darbh ainm Aoife, dó faoi mhodhanna chun fuinneamh a shábháil. Is leabhar oibre é "Guzzler Investigates Energy" atá ag dul leis agus a chuireann leis an leabhar scéalaíochta. Tá an leabhar lán le idirghníomhaíochtaí atá an-oiriúnach don seomra ranga le daltaí sna naíonáin rang a haon agus rang a dó.

I Méan Fómhair 2004 cuireadh bunscoileanna go léir ar an eolas faoi acmhainní nua FIÉ do bhunranganna a bhí ar fáil saor in aisce. Faoi seo tá breis is 1300 leabhar dáilte ar bhunscoileanna. Tugann taighde neamhghoirimíúil le fios go bhfuil an-tóir ar na leabhair i measc múinteoirí agus daltaí araon.

### Ceardlanna Guzzler

Cuireadh idircheardlann le chéile freisin mar chuid den sraith acmhainní seo. Treoraíonn áiseoirí saineolaíochta daltaí tríd an gceardlann praiticiúil seo agus le cabhair puipéid mhóir bíonn cuma réalaióch ar Guzzler do na daltaí. Thosaigh ceardlanna go luath i 2005 agus leanfaidh siad ar aghaidh trí bhliain acadúil na scoileanna ag a bhfuil na leabhair Guzzler faighte cheana.

# An Oifig Eolais um Fhuinneamh In-athnuaite

Is seirbhís náisiúnta de chuid FIÉ í an Oifig Eolais um Fhuinneamh In-athnuaite (OEFI), a bunaíodh i Bandon, Co. Corcaigh chun úsáid acmhainní fuinnimh in-athnuaite a chur chun cinn agus comhairle agus eolas neamhspleácha sholáthar go náisiúnta ar shaincheisteanna airgeadúla, sóisialta agus teicniúla a bhaineann le forbairt fhuinnimh in-athnuaite.

Éascaíonn sé úsáid mhéadaithe fuinnimh ó acmhainní in-athnuaite cosúil leis an ngaoth, an ghrian, bithmhais, cumhacht gheoiteirmeach agus hidreachumhacht trí:

- > Nuachtlitir rialta agus réimse bróisiúr eolais a fhoilsiú
- > Bunachar sonraí de pháirtithe ábhartha in Éirinn a bhfuil ló lárnach acu i dtuilleadh fáis thionscal an fhuinnimh in-athnuaite a choinneáil.
- > Comhdhálacha, ceardlanna agus cruinnithe eolais ar shaincheisteanna a bhaineann le fuinneamh in-athnuaite a eagrú
- > Seirbhís tosaíochta comhairle a sholáthar do lucht pleanála agus lucht déanta cinntí na n-údarás áitiúil

Buiséad 2004: €0.68 milliún

## Dul Chun Cinn i 2004

Bhí 46 feirmeacha gaoithe 340 MW insealbhaithe agus timpeall 200MW á dtógáil; 15 MW gáis líonta talún insealbhaithe agus 1.8 MW adhmaid TCC á dtógáil ag mí na Nollag 2004.

Forbraíodh "paca gaoithe" ina raibh ábhair uasdátaithe agus feabhsaithe don tionscal fuinnimh lucht airgeadais agus lucht ceaptha beartais. Áirítear i measc foilseachán nua eile treoirleabhar díoltóra don mhargadh cónaithe.

D'oibrigh an OEFI taobh leis an Roinn Chomhshaoil agus Rialtas Áitiúil chun athbhreithniú a dhéanamh ar na treoireacha pleanála gaoithe d'údarás áitiúla.

Maidir le dualgais sheachtracha, d'óstáil an OEFI trí chomhdháil náisiúnta agus turasanna staidéir agus ghlac páirt i réimse taispeántais trádála ar a n-áirítear Taispeántas Gairdíní agus Tithe Earraigh, an Taispeántas Fuinnimh, oícheanta eolais agus turasanna staidéir, an Taispeántas Féin-Tógtha, Plean Expo, an taispeántas Uisce agus Timpeallachta na hÉireann agus comhdháil bhliantúil Chumann Fuinnimh Gaoithe na hÉireann.

Chomh maith leis sin, d'eagraigh an OEFI imeachtaí eolais faoi leith agus turasanna staidéir chun tacú le forbairt an mhargaidh maidir le tionscadail gaoithe, na gréine agus bithmhaise chomh maith le trí chuairt ar thaispeántais aon lá amháin ar Thrá Lí, ar

Ghaillimh agus ar Cheannannas Mór le linn na Seachtaine Eolais Fhuinnimh.

Phléigh deasc cuidithe na hOEFI le breis agus 8,000 glaoch.

## FUINNEAMH ADHMAID 2004

Tá an phoiréinsíúil ag Éirinn soláthar breosla dúchasach a thagann ó fhorbairt fhoraoiseacha agus dramhaíl thionscal an adhmaid a fhorbairt. D'fhéadfaí teacht i dtír ar an acmhainn seo ar mhaithe le margaidh bhaile, tionscaláíochta agus onnmhairithe. Tá an-chuid buntáistí ag baint le breoslaí athscagtha mar chipíní adhmaid, millíní adhmaid, brícíní (mín sáibh cúrsáilte) mar tá siad glan agus dlúth, éasca chun stórála, agus tá fuinneamh an-ard iontu.


Bhí sé seo i measc an réimse saincheisteanna a pléadh ag comhdháil a bhí eagraithe ag an FIÉ Oifig Eolais Um Fhuinneamh In-athnuaite in éineacht le COFORD. D'fhreastail breis agus 100 toscairí, ar a n-áirítear Mr. John Browne TD, Aire Stáit ag an Roinn Talamhaíochta agus Bia ag an gcomhdháil dar dteideal "Fuinneamh Adhmaid 2004" a reachtáil le linn gCorcaigh.

Le linn na himeachta a mhair dhá lá, roinn saineolaithe ceannasaíochta ón Ostair, ón nGearmáin, ón tSualainn, ó Mheiriceá agus ó Éirinn a gcuid saineolas agus taithí i bhforbairt tionscadail éagsúla adhmaid.

I measc na dtopaicí eile a tugadh aghaidh orthu le linn na comhdhála bhí meastuchán ar chuid de na deiseanna gnó a bhí ar fáil do thionscadail bhreoslaí adhmaid a bhí ag forbairt; forbhreithniú ar bheartais tacaíochta rathúla Rialtais i limistéir údarás eile; athbhreithniú ar fhorbairtí teicneolaíochtaí nua i réimse táirgiúlacht mhillíní adhmaid, iad a dháileadh, téamh adhmaid agus cumhacht agus teas chomhcheangailte (CTC); agus cuntas de scéalta rathúla ón Ostair agus ó na Stáit Aontaithe Mheiriceá.

Rinne Pearse Buckley ón FIÉ cur i láthair ar thorthaí an Ghrúpa Straitéise Bithfhuinnimh ar stádas reatha acmhainní fuinnimh adhmaid in Éirinn a bhí praiticiúil agus ar fáil. Ina chur i láthair, rinne Conor Casey ó Theicneolaíochtaí Casey cur síos ar phoitéinsíúil a d'fhéadfadh teicneolaíochtaí téamh adhmaid a thabhairt do na hearnálacha tionscaláíochta agus tráchtála in Éirinn.

Thug Tim Cowhig ó Chórais Bithfhuinnimh Neamhspleách, comhchoiste idir Graingers Sawmills agus an grúpa SWS, cur i láthair ar thaithí a chuideachta ar éirigh leis an chéad fhearas CHP bithfhuinnimh a fhorbairt, (fearas ar tugadh tacaíocht dó ag clár RE RD&D). Tá an cumas ag an bhFearas CHP bithfhuinnimh teas 3.5MW a ghineadh don mhúileann sábhadóireachta agus leictreachais 1.8MW le haghaidh onnmhairithe go dtí an greille náisiúnta. Chríochnaigh an chomhdháil le cuairt chuig an bhfearas, atá suite in Enniskeana, Co. Corcaigh.



# Comhaontuithe Deonacha – Gréasán Fuinnimh Thionscail Mhóir (GFTM)

Is tionscnamh deonach gréasáin é Gréasán Fuinnimh Thionscail Mhóir (GFTM) de chuid ochtó de na húsáideoirí fuinnimh tionsclaíochta in Éirinn. Aithníonn na cuideachtaí seo atá tiomanta d'fhuinnimh a laghdú ar bhonn indibhidiúil, an leas a d'fhéadfadh a theacht as comhoibriú ar thionscnaimh le heagraíochtaí eile atá ar aon intinn leo.

Is uirlis luachmhar é do bhainistíocht rathúil an cur chuige struchtúrtha i Leith iniúchta agus bainistíocht fhuinnimh, (chomh maith le ráiteas bliantúil de chuntais fhuinnimh, atá mar choinníoll ballraíochta den Ghréasán).

Is iad príomheilimintí an chláir GFTM ná:

- > Dul chun cinn fheidhmíocht fhuinnimh a thuairisciú agus spriocanna réadúla a leagan síos
- > Eolas a roinnt agus macasamhail den chleachtas is fearr a dhéanamh, trí cheardlanna, láithreán gréasán do bhaill GFTM, cúrsaí a sheachadheolas Cás-Staidéar a scaipeadh
- > Iomaíocht a fheabhsú trí costais fhuinnimh a laghdú
- > Cuidiú le cuideachtaí riachtanais chomhshaoil agus rialacháin a bhaint amach

Buiséad 2004: €0.1 milliún

## Dul Chun Cinn i 2004

Tá thart ar 42.4% de riachtanas tionsclaíochta bunfhuinnimh agus 9.4% de riachtanas bunfhuinnimh náisiúnta ó bhallraíocht an (GFTM)

Mhéadaigh ballraíocht GFTM go 80 gnólacht, a bhfuil caiteachas bliantúil de thuairim is €300 milliún ag baint leo. Tháinig trí ghnólacht nua isteach sa Ghréasán i 2004 agus d'fhág dhá ghnólacht.

Sheol Mr. Noel Dempsey, an tAire Chumarsáide Mara agus Acmhainní Nádirtha an Tuarascáil Bhliantúil GFTM 2003, i mí na Nollag 2004. Ba í a bhí mar chonclúid ar an tuarascáil ná gur shábháil na baill thart ar 123.6 GWh i gcaitheamh na bliana, agus ag éirí as sin laghdú de bheagnach 43,419 tonna CO<sub>2</sub>.

Eagraíodh cúig cheardlann agus sheimineár do bhaill le linn na bliana. Foilsíodh trí nuachtlitir.

Tá sé mar phlean ag an FIÉ leanúint ar aghaidh ag forbairt an ghréasáin agus tá suim léirithe ag roinnt comhlachtaí a bheith ina mbaill.

## AG CUR PRAGHAS AR FUINNIMH AGUS CEARDLANNA TREOCHAÍ, CILL CHAINNIGH

Reachtáir ceardlanna Ghréasán Fuinnimh Thionscail Mhóra (GFTM) gach bliain in áiteanna éagsúla timpeall na hÉireann. Is féidir le baill ghréasáin, ligean do rochtain ar eolas faoin gcleachtas is fearr ar ghéithe teicniúla agus straitéiseacha ag na ceardlanna seo, a chabhróidh leo, dá bharr, deiseanna sábhála fuinnimh laistigh den ghnáthlathair, a uasmhéadú.

D'fhreastail baill an GFTM ar cheardlann i mí Lúnasa 2004, áit inar pléadh, i measc saincheisteanna eile, an réimse fachtóirí a d'fhéadfadh a bheadh tionchar acu ar phraghasanna fuinnimh.

Tá tuiscint ghéar ar an dinimiciúlacht a bhaineann le praghas a chur ar fhuinneamh an-tábhachtach, de bharr praghasanna fuinnimh a bheith neamhshocruithe in Éirinn, chomh maith leis an neamhchinnteacht atá ag baint le margaidh fhuinnimh idirnáisiúnta. Bhí deis ag cuideachtaí baill éisteacht le tuairimí saineolacha lucht eacmanaíochta, lucht comhairliúcháin agus soláthróirí, ag an gceardlann i mí Lúnasa. Chuir an t-eolas seo ar a gcumas cinntí eolasacha maidir le buiséid agus tacar tosaíochta don bhliain seo chugainn a dhéanamh. Thug an imeacht deis do bhainisteoirí fuinnimh ceangal a dhéanamh le lucht gairmiúla ar chomhcheim leo agus tionscadaíl éagsúla bainteach le fuinneamh agus saincheisteanna a phlé leo.

Tharla an imeacht ag an am céanna le fógra an Choimisinéara um Rialachán Fuinnimh faoi mhionsonraí bainteach le hardaithe praghasanna leictreachais. Timpeall an ama seo freisin, sheol an BSL mionsonraí dá Scéim Lacáiste Éilimh Uasghnóthaí Gheimhridh agus bhí cur i láthair ag Greille Náisiúnta BSL ag míniú na difríochtaí, ina ghné den cheardlann.

# Cur Chun Cinn Teicneolaíochta

Tá cuideachtaí Éireannacha anois ag díriú aird níos mó ná riamh fiú, ar an gá atá ann tomhaltas fuinnimh a laghdú agus monatóireacht a dhéanamh air i ngach gné dá fheidhmiúcháin agus é seo go léir i gcoinne cúlra atá go mór faoi bhrú ag saincheisteanna mar athrú aeráide costais breoslaí ag ardú go hidirnáisiúnta agus oscailt mhargaidh gáis agus leictreachais do mhalairt sholáthróirí.

Tá cead ag cuideachtaí a mbíonn tíosacht fuinnimh, agus caomhnú agus cosaint na timpeallachta ina eilimintí lárnacha acu mar chuid dá gcleachtais bainistíochta, éifeacht chostais fuinnimh atá ag ardú, a laghdú agus as sin b'fhéidir go bhfaighidh siad cabhair buntáiste iomaíochta, inmharthana a chruthú dá ngnó. Chomh maith leis sin, is féidir le cuideachtaí leas a bhaint as cur i bhfeidhm teicneolaíochtaí agus teicnící tíosach fuinnimh agus sa chaoi sin ag laghdú ar fhuinnimh a úsáideann siad agus na costais lena mbaineann.

Díríonn an clár seo ar dhur chun cinn modhanna feabhsucháin tíosacht fuinnimh cruthanta agus a chruthaíonn lacáistí an-mhóra in úsáid fuinnimh agus na costais lena mbaineann. D'fhéadfadh iniúchtaí fuinnimh córais bhainistíochta fuinnimh a dhearadh agus a fhorbairt agus cur i ngníomh feachtas ardú feasachta dírithe ar fhostóirí laistigh den ghnáthláithreán a bheith i measc tionscnaimh sábhála fuinnimh.

I measc an réimse ghníomhaíochtaí tugann an clár um Chur Chun Cinn Teicneolaíochta, spreagadh chun go nglacfaí le teicnící agus teicneolaíochtaí den chleachtas is fearr tionscail, agus tugann sé spreagadh agus tacaíocht do thaighde fuinnimh chomh maith le taighde, forbairt agus taispeántas (RD&R).

Buiséad 2004: €0.1 milliún

## Dul Chun Cinn i 2004

Ba é 2004 an chéad bhliain do na Gradaim Fhuinnimh Inmharthana ina bhfuarthas 250 ainmniúchán (féach Cás-Staidéar). Bronnadh 18 gradam ar fad i seacht gcatagóir ag dinnéar mór in Ostán Conrad Baile Átha Cliath i mí na Samhna 2004.

Ba é "I dtreo geilleagair charbóin ísil" téama an Taispeántas Fuinnimh a reachtáladh ar an 12 agus 13 de Bhealtaine san RDS, Baile Átha Cliath. Thug an imeacht deis do sholáthróirí agus cuistiméirí theicneolaíochtaí agus seirbhísí fuinnimh inmharthana buaileadh le chéile, tuairimí a roinnt, gnó a dhéanamh, agus geilleagar charbóin ísil a dhéanamh mar chuid lárnach dá gcuid fheidhmiúcháin laethúla.

Cuireadh cúrsaí ar bhainistíocht fuinnimh agus bainistíocht theach gaileadáin le linn na bliana. Bhí sé seo le cois na n-ocht gceardlann fuinnimh in-athnuaite ag an Taispeántas Fuinnimh.

## GRADAIM FHUINNIMH INMHARTHANA

Cruthaíodh Gradaim Fhuinnimh Inmharthana, a eagraíodh ag FIÉ, agus a urraíodh ag Soláthar do Chustaiméirí BSL, chun cleachtas den scoth i mbainistíocht fuinnimh sna hearnálacha tionscalaíochta, tráchtála agus poiblí, is cuma cé chomh mór is a bhí siad, a spreagadh, a aithint agus gradaim a bhronnadh orthu, chun aithint phoiblí a fháil dá gcuid éachtaí úsáid fuinnimh agus astuithe CO<sub>2</sub> bainteach le fuinneamh a laghdú.

Ba é 2004 an chéad bhliain den scéim ghradaim. Tharla an searmanas chur i láthair i mBaile Átha Cliath i mí na Samhna os comhair lucht féachana 200 de na bainisteoirí fuinnimh agus lucht gairmiúla thionscalaíochta fuinnimh ba shinsearaí.

Ba é Martin O Connor Pfizer Ireland Pharmaceuticals, Little Island, Corcaigh faighteoir Ghradam Bainisteora na Bliana. I measc na gcúiseanna a cuireadh ar aghaidh chun an gradam seo a aithint, bhí a thiomantas gan sárú do bhainistíocht fuinnimh; a thiomantas d'fhorbairt leanúnach ghairmiúil; agus a thiomantas do cheannasaíocht éifeachtach foirne bainistíochta fuinnimh.

Chuaigh an gradam don fhorbhuaiteoir sa Chlár Bainistíochta Fuinnimh Comhordaithe do Auginish Alumina Ltd, mar aitheantas dá éacht den chaighdeán is airde amach is amach i mbainistíocht fuinnimh. (Féach cás-staidéar Comhaontaithe Fuinnimh)

Tá sé beartaithe ag FIÉ na Gradaim Fhuinnimh Inmharthana a leathnú amach i 2005.



# Comhaontuithe Fuinnimh

I Meán Fómhair 2004, d'fhógair an rialtas nach dtabharfadh sé isteach cánachas carbóin. Sa chúlra seo, tá FIÉ ag dul i gcomhpháirtíocht le IBEC chun comhaontú nua fuinnimh a fhorbairt.

Mar thoradh ar an gcóras Trádála Astuithe AE a thabhairt isteach, caithfidh gnóilachtaí aghaidh a thabhairt ar chostais leictreachais níos airde. Tá an ghné seo, chomh maith le neamhsrochrú praghasanna i margaidh fuinnimh idirnáisiúnta, ag gineadh brú níos mó ar chúrsaí gnó.

Is féidir le tionsacht fheabhsaithe agus úsáid níos fearr a bhaint as foinsí fuinnimh athnuachana, cuidiú chun na rioscaí eacnamaíocha a bhaineann le soghalaíocht mhargaidh agus saincheisteanna lena mbaineann.

Bunaithe ar thorthaí an thionscadail phíolótaigh um Chomhaontuithe Idirbheartaithe, creideann FIÉ go bhfuil deis ann spriocanna tíosacha fuinnimh a dhéanamh foirmiúil, bunaithe ar chur chuige comhpháirtíochta ar mhaithe le bainistíocht fuinnimh i dtionscail agus san eacnamaíocht níos leithne. I gcoinne an chúlra seo, tá FIÉ i gcomhpháirtíocht le IBEC, ag forbairt tionscnamh rialúcháin chostas fuinnimh nua. Is iad na heilimintí lárnacha a mbeidh ann ná a dhírú ar chleachtais bhainistíocht fuinnimh dul ar aghaidh, agus ag an am céanna, laghdú suntasach ar ualach comhréireach a raibh go dtí seo bainteach le comhaontuithe idirbheartaíochta. Cinnteofar go n-éireofar le sábhálacha poitéinsiúla fuinnimh agus astuithe agus dul chun cinn eacnamaíoch inmharthana a dhéanamh, trí pháirt a ghlacadh sa Chomhaontú Fuinnimh – agus go háirithe i bhforbairt bainistíochta éifeachtaigh laistigh de chuideachtaí.

Buiséad 2004: €0.49 milliún

## Dul Chun Cinn i 2004

Sonraíonn ceann de shonraí bhuaichphointí an phríomhchlár ba ea cur ar bun struchtúr comhaontaithe nua i bhfianaise fógra an rialtais, nach dtabharfadh sé cáin charbóin isteach.

Tá modhúil leictreachais agus teirmeach a gcuideoidh le cuideachtaí deiseanna sábhálacha fuinnimh a aithint laistigh de struchtúr an Chomhaontaithe Fuinnimh. Chomh maith leis sin, tá dhá tháirge fuinneamh bainistithe, i bpróiseas a bheith forbartha. Soláthróidh an chéad cheann, an Clár um Ghníomhaíocht Bainistíochta Fuinnimh/Energy Action Management Programme (EMAP), treoir phraiticiúil d'aon ghnólacht ar mhian leis fuinneamh a bhainistiú go hinmharthana. Chomh maith leis sin, tá FIÉ agus Udarás Chaighdeán Náisiúnta na hÉireann (UCNÉ) i bpróiseas Caighdeán Bainistíochta Fuinnimh Éireannach a fhorbairt.

## COMHAONTUITHE IDIRBHEARTAITHE – Ó SCÉIM PHÍOLÓTACH GO CUR I NGNÍOMH

Bhí Aughunish Alumina Ltd. (AAL) páirteach i dtionscadal píolótaigh Comhaontuithe Idirbheartaithe an FIÉ i 2002.

Le linn an iniúchta fuinnimh a rinneadh mar chuid den thionscadal píolótaigh seo, aithníodh deiseanna chun sábhálacha fuinnimh a ghineadh trasna réimse áisiúlachtaí agus bainteach le gíomhaíochtaí próisis. Go foriomlán, measadh go raibh líon na ndeiseanna dhun sábhálacha a ghineadh suntasach agus aird faoi leith ar an gcóras téarnaimh teasa.

Mar chuid de chomhaontú a lean agus a idirbheartaíodh i 2003, rinne AAL tiomantas do:

- > Córas bainistíochta fuinnimh creidiúnaithe a chur ar bun
- > Comhordaitheoir fuinnimh tiomanta a cheapadh
- > Tionscadail éagsúla téarnaimh teasa a chur i ngníomh

I nDeireadh Fómhair 2004, fuair AAL creidiúint leis an gCóras Bainistíochta Fuinnimh 2403 Caighdeán na Danmhairge agus mar sin is é an chéad chuideacht in Éirinn ar éirigh leis creidiúint a bhaint amach leis an gcaighdeán fuinnimh a bhfuil aithint idirnáisiúnta air. Chun aitheantas a thabhairt dá thiomantas do bhainistíocht fuinnimh, bhuaigh AAL Gradam Cláir Bhainistíochta hFuinnimh comhorduithe 2004 ag an searmanas um ghradaim inmharthana a reachtáladh i mBaile Átha Cliath i mí na Samhna 2004.

Cuirfidh AAL an chéad chéim eile dá chlár bainistíochta i ngníomh i 2005, tréimhse ina mbeidh réimse tairbhí breise le feiceáil a thagann de bharr a chuid feidhmíthe ar chaighdeán bainistíochta fuinnimh na Dainmhairge.

# Teas agus Cumhacht Chomhcheangailte

Is éard atá i gceist le TCC ná gineadh comhuaineach teasa agus leictreachais inúsáidte in aon phróiseas amháin. Faoi na coinníollacha cearta, d'fhéadfadh TCC a bheith mar dhóigh eacnamúil chun tiosaíocht úsáid fuinnimh a fheabhsú agus chun spriocanna comhshaoil do laghdú astuithe a bhaint amach.

Áirítear le Straitéis an Chláir TCC de chuid FIÉ obair ar phoitéinseal théamh limistéar, staidéir fhéidearthachta/fhearais phíolótacha do thionscadail nuálacha TCC, clár feasachta, tacaíocht do bhunú an Chumainn TCC, moltaí do chóiríú rialacháin agus reachtaíochta TCC, agus luacháil ar mheicníochtaí tacaíochta amach anseo atá ann chun cuidiú leis an Rialtas Beartas um TCC a fhorbairt.

Is éard atá mar aidhm ag Clár Fhuinneamh Inmharthana na hÉireann, ná feasacht níos mó a thógáil ar na tionchair agus ar an leas a bhaineann le teicneolaíocht TCC, agus sa deireadh go raibh lucht airgeadaíthe ní ba thoilteanaí tacú le forbairtí TCC.

Buiséad 2004: €0.13 milliún

## Dul Chun Cinn i 2004

Bunaíodh an Grúpa Beartas TCC/CHP i Márta 2004. Chun cuidiú leis an nGrúpa Beartas moltaí eolasacha a dhéanamh, choimisiúnaigh FIÉ é seo a leanas:

- > Tuarascáil aiciomre ar thréithe atáthar ag súil leo maidir le teicneolaíochtaí "prime mover" do TCC/CHP
- > Luacháil ar reachtaíocht atá ann faoi láthair agus rialachán a théann i bhfeidhm ar theicneolaíochtaí nua in Éirinn
- > Tuarascáil tagarmharcála idirnáisiúnta
- > Tuarascáil ar chumas slabhra soláthair Éireannach um iarratais TCC/CHP

Tá FIÉ tar éis dul i ngníomh chun feasacht a chruthú do TCC/CHP in Éirinn agus tá maoiniú tugtha aige le haghaidh úirlisí dhul chun cinn ar a n-áirítear treoir do theicneolaíocht TCC/CHP, na buntáistí atá aige agus an úsáid a bhaintear as; áis ar líne idirghníomhach a dearadh chun luacháil a dhéanamh ar an suíomh TCC/CHP mar fhreagra ar fhuinneamh a shábháil a chur ar fáil.

Rinneadh dhá staidéar féidearthachta i 2004: Beidh siad seo comhlánaithe i 2005.

Faomhadh sé thionscadal TCC/CHP faoin gclár FIÉ, RD&D Fuinnimh Athnuachana. Faomhadh trí thionscadal bithmhaise faoin scéim AER VI, ag a raibh inniúlacht insealbhaite iomlán de 26.8 MW.

## MOLADH GHRÚPA BEARTAIS TCC/CHP DO CUR INGNÍOMH POLASAÍ NÁISIÚNTA AR TCC/CHP

Aithníonn rialtas na hÉireann go mbeadh méadú ar thíosacht fhuinnimh dá mbainfidh úsáid níos mó as teicneolaíocht teasa agus chumhachta comhcheangailte agus d'fhéadfadh sé cur go mór le laghdú astuithe gáis cheaptha teasa.

Sa chúlra seo, i mí Márta 2004, chuir an Roinn Chumarsáide, Mara agus Acmhainní Nádúrtha Grúpa Beartais ar bun agus é ar intinn acu scrúdú a dhéanamh ar an bpoitéinsiúil chun teacht i dtír níos mó ar an teicneolaíocht seo i margadh na hÉireann, agus bhí sé mar aidhm acu freisin moltaí oiriúnacha a fhorbairt ar mhaithe le cur i bhfeidhm polasaí náisiúnta faoi TCC/CHP in Éirinn. Mar chuid dá thacaíocht don Ghrúpa Beartais, cuireann an FIÉ an Chathaoirleacht agus an Rúnaíocht araon ar fáil.

### Cuspóir

Is iad príomhchuspóirí an Ghrúpa Beartais ná triail a bhaint as, i gcomhthéacs na Treorach AE ar Chomhghineadh agus tionscnaimh polasaí eile lena mbaineann:

- > Na tìmpeallachtaí is fearr chun fearais TCC/CHP a shuiteáil, chun tiosaíochtaí fuinnimh poitéinsiúil a uasmhéadú
- > Na roghanna polasaí agus meicníochtaí tacaíochta atá ar fáil don rialtas chun úsáid níos mó a bhaint as TCC/CHP a spreagadh
- > Moltaí faoi leith chun gníomhaíochtaí a mhéadódh éifeacht an TCC/CHP ag suíomh/insealbhaite chuí in Éirinn
- > Moltaí ar chur i ngníomh polasaí náisiúnta ar an TCC/CHP, bunaithe ar spriocanna ar féidir a bhaint amach.

### Baill

Tá an grúpa sa Roinn Chumarsáide, Mara agus Acmhainní Nádúrtha déanta suas de ionadaithe ar fhorbróirí agus úsáideoirí déantúsaíochta iad, Cumann TCC/CHP na hÉireann, IBEC, an EPA, an Roinn Chomhshaoil agus Rialtas Áitiúil, an Coimisiúin um Rialachán Fuinnimh (CRF/CER) Comhlachtaí Áisiúlachta, comhairleoirí ábhartha, lucht acadúil agus ionadaithe ó FIÉ.

Tugann an Grúpa cuireadh do sholáthróirí, tionscal, údarais áitiúla agus gníomhaireachtaí eile de réir mar is cuí.

### Tuarascáil

Tá tuarascáil dréachta eastramhach eisithe ag an nGrúpa i mí na Nollag 2004. Áireofar sa tuarascáil dheireannach, atá le teacht amach i 2005, ionchur ó réimse leathan páirtithe leasmhara, agus treoir a chur ar fáil do chur i ngníomh beartas an rialtais agus gníomhaíocht ar ghnéithe a bhaineann le TCC/CHP.

# Clár Forbartha Uasghrádú na Greille

Faoi mar atá sí déanta i láthair na huaire, tá greille leictreachais na hÉireann mí-oiriúnach do nascadh lín mhóir de ghineadóirí in-athnuaite le TCC ar scála beag nó meánach, a bheadh suite go mór mhór i gceantair iargúlta. Tá sé seo mar chonstaic maidir le himscaradh na dteicneolaíochtaí seo.

Má fhaightear réidh leis na constaicí seo, cuideoidh sé le fás leictreachais in-athnuaite na hÉireann a spreagadh.

Is iad príomhchuspóirí an chláir seo ná a fháil réidh le míspreagadh láidir maidir le bheith ar an gcéad thionscadal in-athnuaite i gceantair le bonneagar lag leictreachais, agus méid an bhonneagair leictreachais a uasmhéadú agus na deacrachtaí pleanála a bhaineann leis a laghdú.

Tá an Roinn Chumarsáide Mara agus Acmhainní Nádurtha freagrach as an gclár a chur i ngníomh; Cuidíonn an FIÉ, nuair is féidir, lena chur i ngníomh.

I measc eilimintí an chláir tá:

- > Clár dírithe leathnaithe agus atreisiú na bhonneagar greille a fhorbairt do leictreachas in-athnuaite
- > Tionchar leictreachais a ghintear ón ngaoth, agus éifeachtaí an idirnasctha ar an ngréasán a imscrúdú
- > Maoiniú a cheangal chun seoladh agus tarchur an ghréasáin a uasghrádú

Buiséad 2004: €0.01 milliún

## Dul Chun Cinn i 2004

Tá cnuasach amháin á fhorbairt. Tá stádas na n-iarratas chuig an Cnuasach Corderry i gCo. Liatroma mar seo a leanas: Tá glactha le ceithre thairiscint. Iomlán: 21.81 MW Dhé iarratas eile. Iomlán 12.3 MW Níl aon iarratas ag leibhéal tarchuir

### Maoiniú CFUG

Tar éis an athbhreithnithe lár théarma an CFN, ba é 28.28 milliún an maoiniú a bhí faomhaithe don chlár. Go dtí seo meastar go bhfuil 5.72 caiteachas ar chonarthaí le caitheamh ag Gréasáin BSL chun an Cnuasach Corderry a chur i ngníomh. Tá nasctha an chnuasaigh le bheith comhlánaithe i lár 2005.

## COSTAIS AGUS LEASA DO GHINEADH FAOI THALAMH IN ÉIRINN

I Meán Fómhair 2004, choimisiúnaigh an FIÉ BP Power chun anailís chuimsitheach a dhéanamh ar na leasa costais teicniúil, airgeadais agus eacnamaíoch de na tionchair a bheadh ag gineadh faoi thalamh in Éirinn. Iarradh ar na comhairleoirí freisin feidhmeanna cuí tráchtála agus teicniúla a mholadh do ghineadóirí faoi thalamh. Bheadh na feidhmeanna seo deartha chun costais a laghdú agus leasa a uasmhéadú do sholáthóirí leictreachais, d'Oibritheoirí Córais Seolta (OCS/TSO), An Oibritheoir Córais Dáilte (OCD/DSO), don ghineadóir faoi thalamh agus an tomaltóir leictreachais.

### Scóip an Staidéir

Chlúdaigh athbhreithniú an chomhairleora na catagóir seo a leanas:

- > Úsáid a bhaint as sochair ghréasáin
- > Cailteanais chórais agus tíosaíocht chórais foriomlán
- > Cáilíocht agus slándáil sholáthair
- > Costais atreisiú na córais
- > Tionchar gineadh faoi thalamh ar phleananna atreisiú
- > Rialúchán córais, cothromaíocht ualaigh agus sábháilteacht

Rinneadh staidéir chórais chumhachta ar rannóga gréasáin ionadaithe chun réimse an chostais agus na leasa a thagann nuair a dhéantar nascadh idir pollta éagsúla agus saghasanna ginte faoi thalamh.

### Torthaí Staidéir

Mhol na comhairleoirí, modheolaíochtaí, ina bhféadfadh torthaí staidéir chórais chumhachta a chur i ngníomh ag an oibritheoir gréasáin agus feidhm nasctha ginte á meas aige nó aici.

Tá an tuarascáil dheiridh curtha ar fáil le haghaidh meastucháin don Choimisiún Rialachán Fuinnimh, go háirithe i gcomhthéacs athbhreithnithe reatha ar shocrúithe custaim agus don Gréasáin BSL.

Chuir torthaí staidéir an chórais chumhachta in iúl go bhfuil leasa suntasacha sa ghearrthéarma agus sa fadthéarma araon, a dhéadfadh a theacht trí gineadh faoi thalamh a nascadh leis an gréasán dáilte. Baineann éagsúlacht leis na leasa seo de réir an mhéid agus an tsaghais gineadóra atá ann agus an chaoi a chuirtear nasc leis an ngréasán dáilte i bhfeidhm. D'fhéadfadh sé nár leor socruithe custaim simplí gréasáin chun an tionchar dearfach nó diúltach a dhéanfadh a bheith ann nuair a dhéantar nascadh le gréasán gineadóra ag pointe faoi leith. D'fhéadfadh struchtúirí cánacha níos sofaisticiúla a bheith ag teastáil chun na comharthaí cearta margaidh a thabhairt do ghineadóirí beaga.

# Clár Taighde, Forbartha agus Taispeántais Fhuinnimh In-athnuaite

Beidh ról méadaithe ag fuinneamh in-athnuaite maidir le haghaidh a thabhairt ar thrí phríomhspríoc bheartas fuinnimh an Rialtais mar atá slándáil soláthair a chinntiú, iomaíocht chostas agus caomhnú na timpeallachta.

Is é spríoc an chláir ná teicneolaíochtaí fuinnimh in-athnuaite atá cóngarach don mhargadh a scaradh amach agus teicneolaíochtaí a mbaineann féachaint chuige leo sa todhchaí a mheas agus a fhorbairt. Soláthraíonn an clár tacaíocht do thaighde agus forbairt ar tháirgí fuinnimh in-athnuaite, do thaispeántas margaidh do theicneolaíochtaí nua, do staidéir acmhainní agus do ghníomhaíochtaí taighde um maitheas don phobal.

I measc eilimintí an chláir tá:

- > Taighde a dhíríonn ar roghanna beartas a fhorbairt, struchtúr an mhargaidh a shainmhíniú, costais a laghdú, iontaofacht a fheabhsú agus/nó margáí nua a oscailt
- > Staidéir fhéidearthachta do thionscadail fhuinnimh in-athnuaite
- > Taispeántas dírithe ar thionscadail a mbaineann riosca ard agus toradh ard leo, nó ar nuálacht neamhtheicniúil
- > Fiosrúchán ar réimsí lárnacha a bhaineann le cuid mhór teicneolaíochtaí in-athnuaite

Buiséad i 2004: €3.00 milliún

## Dul Chun Cinn i 2004

Sa tréimhse go dtí mí na Nollag 2004, bhí €7 milliún san iomlán tiomanta do 72 tionscadal agus tá €4.5 milliún caite. I mí Bealtaine 2004, bhí an straitéis a bhain leis an gClár Taighde agus Forbairt Fuinnimh RE scagtha níos mó, agus uaidh sin an bhéim chun tacaíocht curtha ar fuinneamh gaoithe, teas bithmaise, bhithbhreoslaí leachtacha, fuinneamh tonnach agus teicneolaíochtaí stórála fuinnimh. Cuireadh athbhreithniú ar chlár Taighde agus Forbairt Fhuinnimh RE i láthair ag an gCruinniú Fuinnimh In-athnuaite i Meán Fómhair, inar cástaispeánadh roinnt phríomhthionscadal an chláir.

Thosaigh an tionscadal TCC/CHP bithmaise IBS ag feidhmiú i mí Bealtaine 2004 le tacaíocht ó Chlár Taighde agus Forbairt Fhuinnimh (RD%D). Tá 100 kM gaileadán bithmaise millíní/slisíní adhmaid insealbhaite ag Coillte agus fuarthas tacaíocht deontais ón FIÉ. Beidh an gailearán á úsáid chun traenáil a chur ar fáil do theicneoirí Éireannacha i bhfeidhmiú agus in insealbhaite córais teasa adhmaid.

Leanann fuinneamh Aigeáin ar aghaidh ag mealladh spéise an Chláir Thaighde agus Forbartha Fuinnimh (RD&D). Tá trí fhorbróirí garaise ag fáil tacaíochta faoi láthair ón FIÉ, ag a bhfuil staidéar coimisiúnaithe atá mar aidhm aige an acmhainn phoitéinsíúil atá ar fáil do mhargadh leictreachais fuinneamh na taoide Uile-Éireannach a mheas.

## COMHADHAIRTE LE BITHMHAIS

Tá roinnt stáisiún cumhachta ag Éirinn atá oiriúnach do chomhadhaint le bithmais, ar a n-áirítear an stáisiún cumhachta guail ag Moneypoint, an stáisiún cumhachta móna in Edenderry, agus an fearas nua móna ag Loch Rí in iarthar Cho. Uí Fháille a chuirfear i bhfeidhm in Eanáir 2005.

Faoi Scéim Trádála Astuithe an AE (STA), tugadh liúntaisí, a chlúdaigh 73.7% dá leibhéal thagartha astuithe CO<sub>2</sub>, do gach ceann de na fearais seo. Sa chúla seo, agus agus tar éis saincheisteanna mar slándáil agus éagsúlacht sholáthar fuinnimh, choimisiúnaigh an FIÉ Electrowatt-Ekono na Fionlainne chun imscrúdú a dhéanamh ar impleachtaí na bhfearas seo a chomhadhaint, mar mhodh lacáiste CO<sub>2</sub>.

Bhí an leibhéal praiticiúil agus a impleachtaí teicniúla eacnamaíochta agus comhshaoil lárnach don taighde seo. Cuireadh tús leis an staidéar i nDeireadh Fómhair 2003 agus comhlánaíodh é faoi mhí Bealtaine 2004.

Thaispeáin sé go bhfuil féidearacht theicniúil ag baint le comhadhaint i ngach cás, gan leasú, go háirithe i bhfearais mhóna. Fad is atá fadhbanna ann maidir le hiarmhairtí adhmaid a fháil ar chostas eacnamaíoch, tá leibhéal 10% de chomhadhaint sna fearais mhóna inmharthana faoi na coinníollacha costais atá ann faoi láthair. Chuirfeadh cur i bhfeidhm costais suas go €30 an tonna in iúl go bhfuil leibhéal níos mó chomhadhainte réadúil.

Eisíodh cóipeanna den tuarascáil seo chuig páirtithe lena mbaineann, agus dáileadh iad freisin ag Comhdháil 2004 Fuinneamh Adhmaid. (féach cás-staidéar OEFI/ REIO).

# Bunfheidhmeanna an Chláir

**Comhaontuithe Chur i nGníomh (IEA) Ghníomhaireachta Idirnáisiúnta Fuinnimh**  
Tá FIÉ tarmligthe ag an Roinn Chumarsáide Mara agus Acmhainní Nádúrtha a bheith ar an bpáirtí conraitheoireachta do thrí chomhaontú na Gníomhaireachta Idirnáisiúnta Fuinnimh (GIF) (IEA) a bhaineann le fuinneamh Gaoithe, Bithmhaise agus Aigéin.

## **Comhaontú Chur i nGníomh na GIF um Fhuinneamh Gaoithe**

Tháinig Éire isteach i gComhaontú Thaighde agus Fhorbairt Ghaoithe na GIF in athuir i 2002. Agus í ag dul isteach ann, roghnaigh Éire a bheith rannpháirteach i dhá iarscríbhinn laistigh den chomhaontú: Iarscríbhinn XI Malartú Eolais BhunTheicneolaíochta agus Iarscríbhinn nua XXI Múnlaí Dinimiciúla d'Fheirmeacha Gaoithe do Staidéir ar Chórais Chumhachta.

Tá rannpháirtíocht na hÉireann sa tionscnamh taighde seo tar éis dul i gceangal leis an nGreille Náisiúnta BSL chun módhúil dhinimiciúla Greille Náisiúnta BSL tuirbíní gaoithe a fhorbairt.

I mí na Samhna 2004, d'óstáil FIÉ cruinniú de na saineolaithe ba thráthúla Comhaontuithe CTF/RD&D Gaoithe IEA agus socraíodh ansin tús a chur le hiarscríbhinn nua a chur ar bun. Beidh sé mar thosaíocht ag an FIÉ rannpháirtíocht de thaighdeoirí Éireannacha san iarscríbhinn seo a dheimhniú.

## **Comhaontú Bithfhuinnimh na GIF**

Tháinig Éire isteach in athuir i gComhaontú Chur i nGníomh na GIF um Bithfhuinneamh i mí Dheireadh Fómhair 2002 agus tá sí gníomhach ó shin Tasc 29 (Gnéithe Socheacnamúla de Chórais Bhithfhuinnimh) Tasc 38 (Cothromaíochtaí na nGás Ceaptha Teasa i gCórais Bhithmhaise agus Bhithfhuinnimh) Tasc 39 (Bithbhreoslaí leachtacha) faoi seach.

Beidh an cruinniú foirmiúil Tasc 38 á reachtáil i mBaile Átha Cliath, agus beidh sé urraithe ag FIÉ, a óstáilfidh freisin cruinniú Coiste Feidhmeannaigh san Fhómhar 2005 den Chomhaontú Cur i nGníomh Bithfhuinnimh IEA.

## **Comhaontú Chur i nGníomh na GIF um Fhuinneamh Aigéin**

Cuireadh tús leis an gComhaontú Chur i nGníomh ar Chórais Fhuinnimh Aigéin i mí Dheireadh Fómhair 2001. Is iad na tosaíochtaí cláir atá ann ná tonnta aigéin agus córais srutháin mhara. Is iad an dá phríomhthasc atá ann i láthair na huairé na malartú eolais faoi chórais fhuinnimh aigéin, agus forbairt na gcleachtas chun córais fhuinnimh aigéin a thriail agus a luacháil.

## **Cláir an AE**

Tá an FIÉ freagrach as ceangal le cuideachtaí maoinithe náisiúnta R&D, ag cur ionadaíocht ar fáil ag leibhéal an AE agus ag cur an AE chun cinn chomh maith le tionscnaimh tacaíochta RD&D idirnáisiúnta eile.

D'éirigh le ceithre thionscadal Éireannacha faoi na chéad Ghlaonna do Mholtaí ar 6ú Clár Creatlaí do Thaighde an AE. Is tionscadail taighde mheántéarmacha nó fhadtéarmacha iad trí cinn de na tionscadail sin. Baineann ceann amháin acu le réimse na mbithbhreoslaí agus baineann dhá cheann acu le forbairt ar thaighde aigéin. Is tionscadal gearrthéarmach-meántéarmach é an ceathrú ceann a imscrúdaíonn imeascadh theicneolaíochtaí micri-TCC agus teicneolaíochtaí fuinnimh in-athnuaite. Beidh an chéad ghlaoch eile do mholtaí ag díriú ar phobail inmharthana.

## **Caidrimh Sheachtracha**

Tá FIÉ freagrach as comheagrú agus ceangal leis na forais chuí ar bhonn réigiúnach, náisiúnta agus idirnáisiúnta chun an cur chun cinn is éifeachtaí de chuspóirí fuinnimh inmharthana a bhaint amach.

Ag leibhéal idirnáisiúnta, leanann FIÉ de bheith rannpháirteach sa ghréasán EnR, cumann na ngníomhaireachtaí fuinnimh Eorpacha, atá mar mheán úsáideach chun éifeachtúlacht chlár náisiúnta a luacháil agus tionscnaimh nua a thaiscéaladh.

# Staitisticí Fuinnimh

Mar chuid den reachtaíocht a bhunaigh FIÉ mar údarás nua, tá sé freagrach as staitisticí cuimsitheacha náisiúnta agus earnála a fhorbairt agus a chothabháil ar tháirgeadh, athrú agus úsáid deiridh fuinnimh. Chun na críche sin, bhunaigh Fuinneamh Inmharthana na hÉireann an tAonad Tacaíochta Staitisticíúil um Beartas Fuinnimh (ATSBF) (EPSSU) mar fhoireann speisialtóireachta laistigh de rannóg na Seirbhísí Forbartha.

Is é ról an ATSBF ná:

- > Staitisticí fuinnimh a bhailiú, a phróiseáil agus a fhoilsiú chun tacú le hanailís agus forbairt ar bheartais de réir na riachtanas náisiúnta agus na n-oibleagáidí idirnáisiúnta
- > Anailísí staitisticíúla agus eacnamaíola a dhéanamh ar sheirbhísí fuinnimh agus ar roghanna fuinnimh inmharthana chun comhairle bheartas a chur ar an eolas agus bunús a chur faoi thosaíocht na gclár
- > Cur le forbairt agus fógairt tháscairí oiriúnacha inmharthanaachta, lena n-áirítear rannpháirtíocht i ngrúpaí oibre náisiúnta agus idirnáisiúnta

## An Grúpa Comhordnaithe Staitisticí Fuinnimh

Chomhbhunaigh CSO agus FIÉ an grúpa seo i 2002 chun cur i ngníomh mheicníochtaí do chomhoibriú idir an dá eagraíocht i réimse na staitisticí fuinnimh a bhunú agus a fhorbheathnú. Éascaíonn sé seo forbairt agus anailís ar chorpas níos cuimsithí staitisticí fuinnimh.

## Foilseacháin i 2004

### Fuinneamh in Éirinn (Energy in Ireland) 1990 – 2002

Seoladh an chéad thuarascáil i mí Bealtaine 2003. Tá Fuinneamh in Éirinn ag déanamh imscrúdú ar threochtaí fuinnimh in Éirinn ó 1990, pléann sé na bunchúiseanna agus cuireann sé na treochtaí i gcomparáid le spriocanna Rialtais agus AE chun forbairt na mbeartas agus na dtoisí atá in úsáid chun na spriocanna sin a bhaint amach a chur ar an eolas. Is é an gné is suntasaí den eagrán 2004 ná an díchúpláil suntasach fuinnimh ó fás eacnamaíoch, agus díchúpláil astuithe CO<sub>2</sub> ó thomhailt fuinnimh.

### Próifiliú de Thomhailt Fuinnimh agus Astuithe CO<sub>2</sub> i dTionscal: uasdátaithe 2004

Chuir an tuarascáil seo próifíl d'úsáid fuinnimh tionsclaíochta i láthair agus astuithe CO<sub>2</sub> bunaithe ar shonraí a eisíodh ón CSO i 2001. Rinne sé meastuchán freisin ar leochailleacht fiontair tionsclaíochta d'athruithe praghasanna fuinnimh.

### Tíosaíocht Fuinnimh in Éirinn

Foilsithe i Lúnasa 2004, thug an tuarascáil seo faoi straitéis agus forbairt bheartais san earnáil fuinnimh in-athnuaite a chur ar an eolas. Cuireann an tuarascáil tacar sonraí cuimsitheach ar fáil agus anailís d'fhuinneamh in-athnuaite in Éirinn ag dul leis, ar bhonn Uile-Éireannach.

### Teas agus Cumhacht Chomhcheangailte in Éirinn

Rinne an tAonad Tacaíochta Staitisticíúil um Beartas Fuinnimh in FIÉ suirbhé ar insealbhaite teasa agus cumhachta comhcheangailte (TCC) in Éirinn le linn 2003. Cuireadh torthaí na suirbhé seo i láthair sa tuarascáil seo, a foilsíodh i mí Mhárta 2004, agus thuairisc sí ar threochtaí i dTCC ó 1991.

### Tionscadal Tháscairí Tíosaíochta Fuinnimh: (Odyssee/Mure)

Is tionscadal é an tionscadal Odyssee atá ar bun ar fud an AE, a tionscnaíodh i 1992 agus a bhfuil ceithre bhallstát déag páirteach ann. Is éard is aidhm leis ná táscairí oiriúnacha a fhorbairt, a tháirgeadh agus a fhoilsiú chun treochtaí fuinnimh a mheas agus chun tuiscint níos fearr a fháil ar na tiománaithe atá taobh thiar de na treochtaí seo. Forbraíodh roinnt táscairí comhiomlána i 2004. Táthar ag leanúint leis an tionscadal faoi réir athnuachana bliantúla.

Ag deireadh 2004, shínigh FIÉ conartha dhá bhliain don chéad phas eile den tionscadal seo, ag tosú i mí Aibreáin 2005.

### Comhchuibhiú Sonraí Fuinnimh d'Astuithe CO<sub>2</sub>

Ba é cuspóir an tionscadail seo maoinithe ag Eurostat, a tionscnaíodh i 2002, ná comhchuibhiú a dhéanamh ar na sonraí fuinnimh ar bhain an Ghníomhaireacht um Chaomhnú Comhshaoil agus Eurostat úsáid astu chun fardal náisiúnta na n-astuithe CO<sub>2</sub> a áireamh. Cuireadh tuarascáil eatramhach ar dhifriochtaí sna sonraí do na blianta 1990, 1995 agus 2000 ar aghaidh chuig Eurostat i mí Feabhra 2004. Aontaíodh níos imeachta chun na difriochtaí a bhí le cur ar aghaidh a ghlanadh amach i mí Mhárta 2004. Cuireadh an tuarascáil deiridh, lena n-áirítear sonraí uasdátaithe fuinnimh i bhfoirm cheistiúchán bliantúil don tréimhse 1990 – 2002 i gcrích i mí Mhárta 2004.

### Eolas a Roinnt

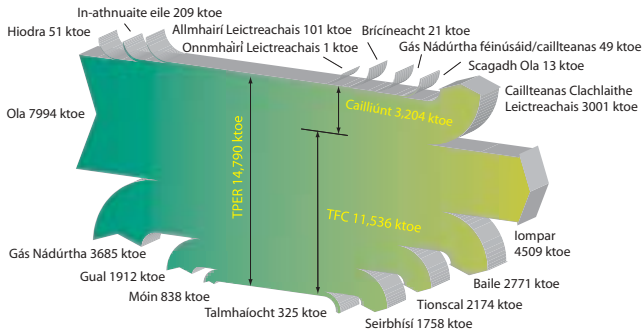
Is ball é an tATSBF de Ghrúpa Úsáideoirí Sonraí Fardail na Straitéise Náisiúnta um Athrú Aeráide, atá freagrach as cuidiú le forbairt fhardal agus réamh-mheastachán feabhsaithe, lena n-áirítear díchomhbhailiú cuí agus creatlach chun tionchair na mbeartas difriúil agus na dtoisí margaidh a mheasúnú.

Tá an tATSBF ar Choiste Staitisticí Fuinnimh Eurostat freisin, agus bhain dhá ghrúpa oibre dá chuid le Táscairí Tíosaíochta Fuinnimh agus Staitisticí TCC.

1. An staid reatha - - ceanglas fuinneamh príomh iomlán, de réir breosla agus de réir earnála
2. Gineadh leictreachais
3. Dúshlán Kyoto – Astuithe gáis ceapadh teasa na hÉireann de réir foinsé
4. Astuithe CO<sub>2</sub> a bhaineann le fuinneamh de réir modh feidhmíochta
5. Fuinneamh in-athnuaite mar chéatadán den fhuinneamh a theastaíonn chun leictreachas a tháirgeadh
6. Speáchas allmhairithe Breosla – Éire agus AE

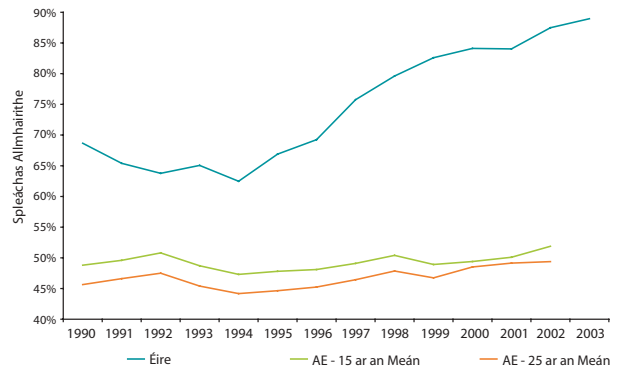
# Sleachta as Fuinneamh in Éirinn

## Sreabhadh Fuinnimh in Éirinn 2003

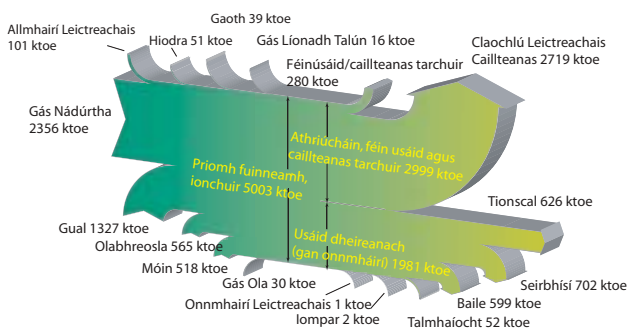


Tabhair ar aird: tá roinnt difríochtaí staitisticíúla ann idir ionchuir agus aschuir.

## Speáchas Allmhairithe Beosla – Éire agus AE

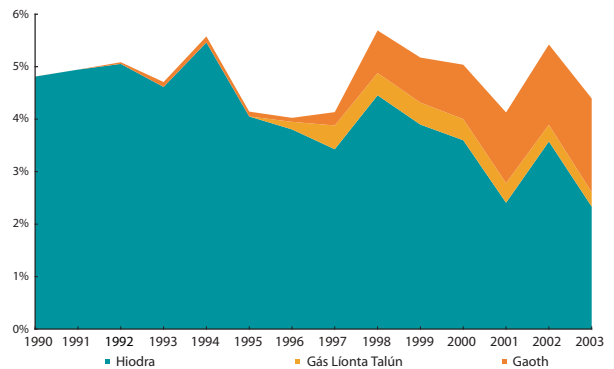


## Sreabhadh Fuinnimh i nGiniúint Leictreachais 2003

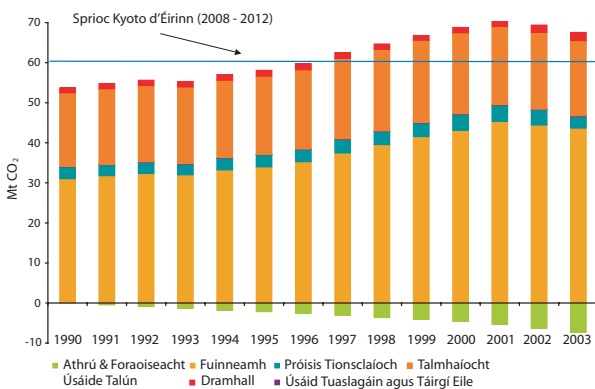


Tabhair ar aird: tá roinnt difríochtaí staitisticíúla ann idir ionchuir agus aschuir.

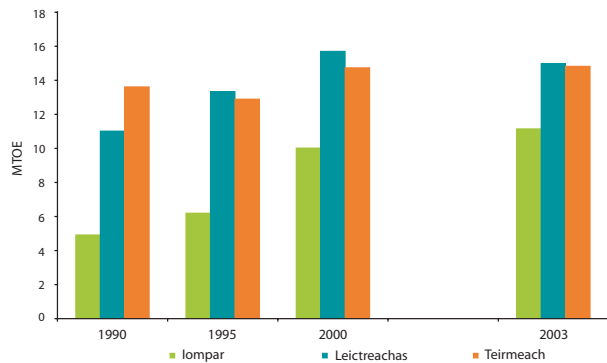
## Fuinneamh in-athnuaithe mar Chéatadán den Fhuinneamh a theastaíonn chun Leictreachas a Tháirgeadh



## Astuithe Gáis Ceapadh teasa na hÉireann de réir Foins



## Astuithe CO<sub>2</sub> a bhaineann le Fuinneamh de réir Modh Feidhmíochta



# Tuarascáil Riaracháin

## Cód Cleachtais do Rialú Fhoras Stáit

I mí Dheireadh Fómhair 2001 d'fhaomh an rialtas Cód Cleachtais nua do Rialú Fhoras Stáit. Tá athbhreithniú déanta ag an mBord ar na príomhfhórála agus tá toisí glactha aige chun a chinntiú go gcomhlíontar iad.

### Rialuithe Inmheánacha

Áirítear le córas rialaithe inmheánach FIÉ beartais, próisis, tascanna, iompraíochtaí agus gnéithe eile den eagraíocht, a éascaíonn oibriúcháin éifeachtacha, éifeachtúla agus ag an am céanna cinntíonn sé tuairisciú cáilíochta agus comhlíonadh rialacháin agus reachtaíochta. Mar chuid de sin comhlíonadh FIÉ an Cód Cleachtais do Rialú Fhoras Stáit maidir le gach saincheist soláthair agus chánachais agus dualgais iniúchta.

### Sláinte agus Sábháilteacht

De réir an Achta um Shábháilteacht, Sláinte agus Leas ag an Obair, 1989, cuireann FIÉ cultúr dearfach sláinte agus sábháilteachta chun tosaigh ar fud na heagraíochta. Féachann sé chun coinníollacha oibre a sholáthar atá slán agus sláintiúil, chun sábháilteacht áitribh, trealamh agus timpeallacht ghinearálta oibre FIÉ a chinntiú, agus chun a chinntiú, chomh fada agus atá réasúnta ó thaobh praiticiúil de, nach gcuirtear sláinte nó sábháilteacht aon duine a dtéann a oibriúcháin i bhfeidhm orthu, idir an fhoireann agus an pobal, i mbaol.

Is é beartas an FIÉ i gcónaí ná leas na bhfostaithe a chosaint trí timpeallacht oibre shábháilte a chothú agus córas oibre de bhun na gceanglas san Acht um Shábháilteacht, Sláinte agus Leas ag an Obair, 1989.

### Leas Bhaill agus Rúnaí an Bhoird

Faoi réir teoracha na Roinne Airgeadais do Ghníomhaíochtaí Stáit, tá a gcuid leasa cláraithe ag baill chuideachtaí i ndualgais eile leis an Rúnaí agus ní bhíonn siad rannpháirteach i gcinntí ná ní fhaigheann siad doiciméadacht mar gheall ar na dualgais seo agus eile nuair a d'fhéadfadh coimhlínt leasa a bheith i gceist.

### Suíomh

Tá príomhoifig FIÉ suite ar champas Fhiontraíocht Éireann i nGlas Naíon agus tá dhá oifig réigiúnach aige, ceann amháin atá suite ar áitribh Fhiontraíocht Éireann i Sligeach agus ceann eile atá suite i bPáirc Ghnó an Aerfoirt i gCorcaigh.

Faoi scéim dhílárnaithe an Rialtais, tá príomhoifig FIÉ le hathlonnú i nDún Dealgan, Contae Lú.

# Aguisín 1 - Rogha Fhoilseachán FIÉ

SEI five-year strategy  
A review of fuel poverty and low income housing

## **Don Bhaile**

Information guides  
Guide to insulating your home  
A Detailed Guide to Home Heating Systems  
Building an Energy-Efficient Home  
Purchasing an Older House  
Consumer guide to sustainable energy  
How to make your home more energy efficient

## **Don Scoil**

Energy resources in Ireland  
Energy in our lives  
Exploring energy  
Guzzler's big book on energy  
Hey everything's working  
The energy life

## **Na hEarnálacha Tionscail, Tráchtála agus Poiblí**

### *Tionscal*

Large Industry Energy Network – Annual Reports:  
2000 – 2002 inclusive  
Annual Self Audit & Statement of Energy Accounts Scheme  
Annual Report 2000 – 2001  
*Energy Focus* quarterly newsletter

### *Comhaontuithe Idirbheartaithe*

Negotiated Agreements Focus on Thermal Energy Reduction  
Negotiated Energy Agreements Pilot Project Final Report 2003  
Negotiated Energy Agreements Pilot Project Final Report  
Executive Summary 2003

### *Tiosaíocht Fhuinnimh i bhFoirgnimh*

Commercial/Industrial Fuels – comparison of Energy Costs  
Good practice Case Study – BEMS at UCD, Belfield  
Good Practice Case Study – Gaelscoil An Eiscir Riada, Tullamore,  
Co. Offaly  
Good Practice Case Study – Mater Private Hospital  
Good Practice Case Study – Limerick County Hall  
Good Practice Case Study – St. Dymphna's Hospital Carlow  
Good Practice Case Study – Finglas Swimming Pool  
Managing Energy – A Strategic Guide for SMEs

## **Staitisticí**

Energy In Ireland 2002 :Trends, Issues and indicators 1990-2001  
Profiling Energy Consumption and CO<sub>2</sub> emissions in Industry  
2004 update: Sensitivity to Carbon Taxation and Emissions Trading  
Energy and CO<sub>2</sub> Efficiency in Transport: Analysis of new car  
registration in year 2000  
Combined Heat and Power in Ireland:Trends and Issues 1991-2002

## **Foilseacháin Fhuinnimh agus Iompair In-athnuaite**

### *Gaoth*

A study of renewable energy in the new Irish electricity market  
Attitudes towards the Development of Wind Farms in Ireland  
How to develop a Wind Farm  
Operating reserve requirements for wind power penetration  
increases in the Irish electricity system

### *Bithmhais agus Dramháil*

An Assessment of the Renewable Energy Resource Potential of  
Dry Agricultural Residues in Ireland  
A Resource Study on Recovered Vegetable Oil and Animal Fats  
Cofiring with biomass  
Landfill Gas in Ireland – The Facts  
Quality Assurance for rapeseed oil as a vehicle fuel

### *Fuinneamh In-athnuaite i bhFoirgintí*

Passive Solar Design – Solar Homes Catch the Sun  
Solar Energy in the Home  
Solar Water Heaters  
Wood Pellet Stoves  
A renewable heat pump in your house

### *Iompar*

The Route to Sustainable Commuting  
Sustainable Transport  
Strategies to reduce greenhouse gasses from Irish transportation

# Aguisín 2 - Tionscadail Faofa i 2004

Leagann an aguisín seo amach liosta de gach tionscadal taispeántais lenar íocadh airgead i 2004. Níl staidéir choimisiúnaithe ná tuarascálacha, tacaíocht rialtais ná, feidhmíocht agus dul chun cinn cláir ann.

## Scéim Tacaíochta um Staidéar Deartha

Comhairle Cathrach Chorcaí	€ 6,200
An Roinn Oideachais agus Eolaíocht	€ 22,110
Forfás	€ 6,000
Comhairle Contae Chiarraí	€ 6,875
Bord Sláinte Lártíre	€ 6,000
Ollscoil Náisiúnta na hÉireann, Gaillimh	€ 10,000
Institiúid Teicneolaíochta Phort Láirge	€ 7,500
Comhairle Contae Loch Garmáin	€ 7,500
	<u>€ 72,185</u>

## Scéim Infheistíochta Poiblí i Múnlaí de Réitigh

Comhairle Contae Chorcaigh	€ 5,750
An Roinn Cosanta	€ 38,026
Comhairle Cathrach Bhaile Átha Cliath	€ 58,664
Ollscoil Chathair Bhaile Átha Cliath	€ 50,000
Institiúid Teicneolaíochta Bhaile Átha	€ 69,271
Institiúid Teicneolaíochta Dhún Dealgan	€ 40,945
Ospidéal Cnáimhseachais Shráid Holles	€ 259,937
Comhairle Contae Chill Dara	€ 50,061
Institiúid Teicneolaíochta Leitir Ceanainn	€ 34,784
Briogáid Dóiteáin Chathair Luimní	€ 29,711
Comhairle Contae Mhaigh Eo	€ 9,590
Ospidéal Thrócaire na hOllscoile	€ 14,782
Bord Sláinte an Oirthuaiscirt	€ 23,550
Oifig na nOibreacha Poiblí	€ 97,483
Na Coimisinéirí Ioncaim	€ 11,258
Bardas Shligigh	€ 20,804
Comhairle Contae Thiobraid Árann Theas	€ 58,573
Coláiste na hOllscoile, Corcaigh	€ 316,000
Coláiste na hOllscoile, Baile Átha Cliath	€ 157,639
Ollscoil Luimní	€ 47,989
Bord Sláinte an Iarthair	€ 132,322
	<u>€ 1,527,139</u>

## An biuro um Bainistíocht Fuinnimh

"e3" – € UCD, DCU, DIT agus Trinity	€ 18,482
Ceangaltais Iomlán	€ 48,919
	<u>€ 67,401</u>

## An Clár um Thithíocht Ioncaim Ísil

Action Inishowen	€ 32,822
Clondalkin Home Improvement Project	€ 113,470
CúnamhEnergy Action Ltd	€ 90,565
Cúnamh Energy Action Ltd	€ 32,822
Energy Action	€ 173,463
Meitheal Forbartha na Gaeltachta	€ 22,300
Northside Community Enterprises Safe Ltd	€ 110,834
Southill Community Services Board	€ 18,391
Wexford Area Partnerships	€ 27,645
Ceangaltais Iomlána	<u>€ 589,490</u>

## Aguisín 2 - Tionscadail Faofa i 2004

### Clár Taighde agus Forbartha Fhuinnimh In-athnuaite

Airtricity Developments (Ireland) Ltd	€ 83,056
Anthony Childs	€ 13,141
Arsenal et al	€ 24,515
ART Generation	€ 11,146
Biogreen Fuels Ltd	€ 48,922
Camphill Community Jerpoint Thomastown	€ 18,107
CENER	€ 49,380
Clearpower Limited	€ 9,208
Coillte	€ 72,086
CSA Group Ltd.	€ 77,008
Danish Energy Authority	€ 20,070
Dunstar Ltd	€ 4,075
Electricity Research Centre, UCD	€ 40,547
ESBI Consultants	€ 10,073
Freshford 20/20 Ltd.	€ 20,000
Gaoth Tec Teo	€ 191,239
Glanbia Plc	€ 34,250
Glenstal Abbey	€ 9,298
Independent Biomass Systems	€ 500,000
Institute for Numerical Computation and Analysis/Airtricity Ltd.	€ 6,825
Marketmaker Software Ltd	€ 13,750
Meenacloghspar Ltd	€ 59,329
Ocean Energy Ltd	€ 19,383
Riso National Laboratory	€ 45,488
Shamrock Solar Energies Ltd	€ 8,155
The Western Development Commission	€ 8,000
Tipperary Co-Operative Creamery Ltd	€ 15,700
Wavebob Ltd	€ 21,574
Youngfield Workshops	€ 24,303
	<u>€ 1,458,628</u>

### An Clár um TCC/Théamh Limistéar

BMF Business Services	€ 25,298
	<u>€ 25,298</u>

### Clár Taighde agus Forbartha Theach an Lae Amáraigh

Seirbhísí na mBráithre Carthanachta	€ 30,795
Camphill Communities	€ 22,500
Century Homes Ltd	€ 138,830
Des Foley	€ 25,000
Comhairle Cathrach Bhaile Átha Cliath	€ 200,000
An Ghníomhaireacht um Chaomhnú Comhshaoil	€ 4,305
Comhairle Cathrach na Gaillimhe	€ 160,000
Gníomhaireacht Fuinnimh na Gaillimhe	€ 1,250
McInerney Homes Ltd	€ 45,000
O Mahony Pike Architects	€ 7,500
Radon Ireland Group Ltd	€ 30,000
Comhairle Contae Thrá Lí	€ 96,000
Coláiste na hOllscoile, Corcaigh	€ 4,800
Coláiste na hOllscoile, Baile Átha Cliath	€ 15,825
Coláiste na hOllscoile, Baile Átha Cliath/ERG	€ 5,412
	<u>€ 787,218</u>

### Transport

Dublin City Council	€ 100,000
	<u>€ 100,000</u>



Is é **an misean atá againn** ná cuidiú le forbairt fuinnimh inmharthana agus é a chur chun cinn



## Ráitis Airgeadais don Bhliain dar Críoch 31 Nollaig, 2004

### Ábhair

Ráiteas maidir le Córas Rialúcháin Inmheánaigh Airgeadais	1
Ráiteas i leith Fhreagrachtaí an Bhoird	2
Tuarascáil an Ard-Reachtair Cuntas agus Ciste	3
Beartais Chuntasáíochta	4
Cuntas Ioncaim agus Caiteachais	5
Clár Comhardaithe	6
Nótaí a ghabhann leis na Ráitis Airgeadais	7-15

## Ráiteas maidir le Córas Rialúcháin Inmheánaigh Airgeadais

Thar ceann Bhord Fuinneamh Inmharthana Éireann, admhaím an fhreagracht atá orainn deimhniú go ndéantar córas éifeachtúil rialúcháin inmheánaigh airgeadais a chothabháil agus a fheidhmiú.

Ní féidir leis an gcóras ach urrús réasúnach a thabhairt, agus ní urrús absalóideach, go ndéantar sócmhainní a chosaint, idirbhearta a údarú agus a thairneadh i gceart, agus go ndéantar earráidí nó neamhrialtachtaí ábhartha a chosc nó go dtabharfaí iad faoi deara in achar tráthúil ama.

### Eochairnósanna Imeachta Rialúcháin

Ghlac an Bord céimeanna chun a chinntiú go mbeadh timpeallacht chúil rialúcháin ann, trí fhreagrachtaí bainistíochta a shainmhíniú go soiléir, lena n-áirítear teipeanna suntasacha rialúcháin a thairneadh agus gníomhartha cuí ceartúcháin a chinntiú.

Tá an Bord ag obair ar phrósas a bhunú chun rioscaí gnó a aithint agus a mheasúnú:

- > trí chineál, fairsinge agus impleacht airgeadais na rioscaí a aithint; tríd an dóchúlacht go dtarlóidh na rioscaí aitheanta a mheas;
- > trí mheasúnú a dhéanamh ar chumas an chomhlachta na rioscaí
- > a tharlaíonn a bhainistiú agus a mhaolú.

Tá an córas rialúcháin inmheánaigh airgeadais bunaithe ar chreat d'fhaisnéis bhainistíochta rialta, nósanna imeachta riaracháin lena n-áirítear leithscaradh dualgas, agus córas tarmhigin agus cuntasachta. Go háirithe, áirítear:

- > córas cuimsitheach buiséadúcháin lena n-áirítear buiséad bliantúil a athbhreithníonn agus a chomhaontaíonn an Bord;
- > athbhreithnithe rialta ag an mBord ar thairneadh airgeadais tréimhsíúla agus bliantúla a léiríonn an feidhmíocht airgeadais i gcomparáid leis na réamhaisnéis;
- > spriocanna a leagadh síos le feidhmíocht airgeadais agus feidhmíocht eile a thomhas;
- > leibhéal chúil infheistíochta léirithe le haghaidh clár maoiniúcháin.

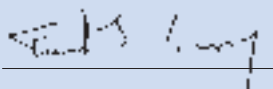
Cuireadh feidhm iniúchta inmheánaigh Fuinneamh Inmharthana Éireann amach ar conradh chuig cuideachta cuntasóirí ag deireadh 2002. Braitheann an plean iniúchta inmheánaigh bliantúil a forbraíodh, ar anailís na rioscaí a bhíonn os comhair an údaráis. D'fhormhuinigh an Coiste Iniúchta an cur chuige sin agus cheadaigh an Bord é. Cheadaíonn an Coiste Iniúchta Plean Iniúchta Straitéisigh Inmheánaigh agus déanann sé athbhreithniú air go bliantúil nuair is gá. Tugann na hiniúcháir inmheánacha tuairiscí don Choiste ar thascanna a rinneadh. Leagann na tuairiscí sin béim ar easpaí sa chóras rialúcháin inmheánaigh airgeadais, nó laigeachtaí sa chóras sin, más ann dóibh.

Tá monatóireacht agus athbhreithniú déanta ag an mBord ar éifeachtacht an chórais rialúcháin inmheánaigh airgeadais le haird ar na tuarascálacha agus ar an obair atá déanta ag an mbainistíocht, ar ghrúpa oibre na bpolasaithe agus nósanna imeachta, ar an gcoiste iniúchta agus ar na hiniúcháir inmheánacha, in éineacht leis an bpróiseas bainistithe riosca atá ar bun ag an eagraíocht faoi láthair.

### Athbhreithniú Bliantúil ar Rialúcháin

Dearbhaím go raibh athbhreithniú déanta ag an mBord ar éifeachtúlacht an chórais rialúcháin inmheánaigh airgeadais i leith na bliana dar críoch 31 Nollaig 2004.

### Sínithe thar ceann an Bhoird



An Cathaoirleach

# Fuinneamh Inmharthana Éireann

## Ráiteas i leith Fhreagrachtaí an Bhoird don bhliain dár críoch 31 Nollaig 2004

Bunaíodh Fuinneamh Inmharthana Éireann – Údarás na hÉireann um Fhuinneamh Inmharthana (ar a dtugtar Fuinneamh Inmharthana Éireann) faoin Acht um Fhuinneamh Inmharthana 2002 agus tháinig sé ar an saol ar 1 Bealtaine 2002. Faoi alt 21(2) den Acht, rinneadh trealamh agus maoin uile Fhiontraíocht Éireann, le haghaidh úsáide Ionad Fuinnimh na hÉireann, seachas an mhaoin a ndéantar tagairt di in alt 21(1) den Acht, a aistriú chuig Fuinneamh Inmharthana Éireann ar an dáta sin.

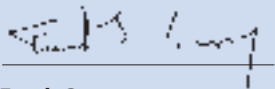
Éilíonn Alt 24(2) den Acht um Fhuinneamh Inmharthana 2002 ar an Údarás ráitis airgeadais a ullmhú i gcibé formáid a cheadaíonn an tAire Cumarsáide, Mara agus Acmhainní Náidúrtha, le cead an Aire Airgeadais.

Agus na ráitis airgeadais seo á n-ullmhú, ceanglaítear ar an mBord:

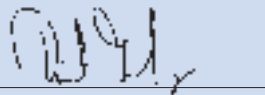
- > beartais chuí chuntasaíochta a roghnú agus a chur i bhfeidhm go seasta;
- > breithiúnais agus meastacháin a dhéanamh a bhíonn réasúnach agus ciallmhar;
- > na ráitis airgeadais a ullmhú ar bhonn gnóthais leanúnaigh, ach amháin i gcás nach cuí a thiomhdiú go leanfaidh sé de bheith i bhfeidhm;
- > dearbhú ar comhlíonadh na caighdeáin chuntasaíochta infheidhme nó nár comhlíonadh iad, faoi réir ag aon neamhchomhlíonadh ábhartha a nochtadh agus a míníodh sna ráitis airgeadais.

Tá an Bord freagrach as leabhair chuí cuntas a choimeád, a nochtann, le cruinneas réasúnta ag am ar bith, stádas airgeadais an Údaráis, agus a ligeann dó a chinntiú go gcomhlíonann na ráitis airgeadais Alt 24 den Acht um Fhuinneamh Inmharthana 2002. Tá an Bord freagrach freisin as na sócmhainní uile a atá mbíonn faoi rialú oibríochtúil aige a chosaint, agus mar sin, tá sé freagrach as réasúnta a ghlacadh le calaíocht agus neamhrialtachtaí eile a chosc agus a aimsiú.

### Sínithe thar ceann an Bhoird



**Frank Convery**  
An Cathaoirleach



**David Taylor**  
An Príomhfheidhmeannach

## Tuarascáil an Ard-Reachtair Cuntas agus Ciste le cur i láthair Thithe an Oireachtais

---

Tá na ráitis airgeadais ar leathanaigh 4 go dtí 15 iniúchta agam faoi Alt 24(3) den Acht um Fhuinneamh Inmharthana, 2002.

### **Freagrachtaí Chomhaltaí an Bhoird agus an Ard-Reachtair Cuntas agus Ciste faoi seach**

Tá freagrachtaí cuntasáochta Chomhaltaí an Bhoird leagtha amach ar leathanach 2. Tá sé de fhreagracht ormsa tuairim neamhspleách a dhéanamh, bunaithe ar m'iniúchadh, i leith na ráiteas airgeadais a cuireadh i mo láthair agus tuarascáil a fhoilsiú orthu.

Scrúdaím an ráiteas ar leathanach 1 ar an gcóras um rialú inmheánach airgeadais le féachaint an léirítear ann gur chomhlíon an tÚdarás treoir infheidhmithe maidir le rialachas corparáideach agus tuairiscím ar aon chás ábhartha nach ndéanann an tÚdarás amhlaidh, nó más rud é go bhfuil an ráiteas míthreorach nó nach dtagann sé le faisnéis eile atá ar eolas agam de bharr na ráitis airgeadais a bheith iniúchta agam.

### **An Bunús atá le mo Thuairim ar na Ráitis**

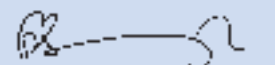
I mbun m'fheidhme mar Ard-Reachtair Cuntas agus Ciste, rinne mé m'iniúchadh ar na ráitis airgeadais de réir na gcaighdeán iniúchóireachta arna n-eisiúint ag an mBord um Chleachtais Iniúchóireachta agus trí thagairt a dhéanamh do na nithe ar leith is gá a chur san áireamh agus a ghabhann le comhlachtaí Stáit i ndáil leis an mbealach a bhainistítear agus a oibrítear na comhlachtaí sin.

Déantar scrudú mar chuid den iniúchadh, ar bhonn tástála, ar fhianaise a bhaineann leis na suimeanna agus leis an méid a fhoilsítear sna ráitis airgeadais. Chomh maith leis sin, cuimsíonn an t-iniúchadh measúnacht ar na meastacháin agus ar na breitheanna suntasacha a rinneadh agus na ráitis airgeadais á n-ullmhú, agus measúnacht le féachaint an oireann na beartais chuntasaíochta don bhail atá ar chúrsaí an Údaráis, ar feidhmíodh na beartais sin ar bhealach leanúnach agus ar foilsíodh iad ar bhealach sásúil.

Phleanáil mé agus rinne mé m'iniúchadh sa chaoi is go bhfaighinn an fhaisnéis agus na mínithe ar fad a mheas mé a bheith riachtanach ionas go mbeadh leordhóthain fianaise agam a d'fhágfadh cinnteacht réasúnach ann go bhfuil na ráitis airgeadais saor ó mhíríteas ábhartha, cibé acu calaois nó neamhrialtacht eile nó earráid is cúis leis sin. I dteacht ar mo thuairim, rinne mé meastóireacht ar a shásúla is a cuireadh faisnéis i láthair sna ráitis airgeadais san iomlán freisin.

### **Tuairim**

Is é mo thuairim go raibh leabhair chuntais chuí coinnte ag an Údarás agus go dtugann na ráitis airgeadais, a chomhaontaíonn leo, léargas fíorcheart ar staid chúrsaí an Údaráis ar an 31 Nollaig 2004 agus ar a ioncam agus ar a chaiteachas don bhliain dar críoch sin.



**Gerard Smyth**  
**Le haghaidh agus thar ceann an**  
**Ard-Reachtair Cuntas agus Ciste**  
**9ú Meitheamh 2005**

### (A) Tréimhse na Ráiteas Airgeadais

Clúdaíonn na ráitis airgeadais an tréimhse ó 1 Eanáir go dtí 31 Nollaig 2004.

### (B) Bonn na Cuntasaíochta

Ullmhaíodh na ráitis airgeadais ar bhonn fabhráithe, ach amháin na ráitis thíosluaite, agus ullmhaíodh iad de réir Cleachtais Chuntasaíochta a nglactar leis go ginearálta, faoin gcoinbhinsiún costais stairiúil agus san fhormáid a cheadaigh an tAire Cumarsáide, Mara agus Acmhainní Nádúrtha. Glactar le Caighdeán Tuairiscithe Airgeadais a nglacann na comhlachtaí cuntasaíochta aitheanta leo de réir mar a bhíonn siad infheidhme. Tá na ráitis airgeadais in aonad airgeadra an Euro.

### (C) Deontais Stáit

Léiríonn na Deontais Stáit a thaispeántar sa Chuntas Ioncaim agus Caiteachais an méid a fuarthas ón Roinn Cumarsáide, Mara agus Acmhainní Nádúrtha.

### (D) Sócmhainní Seasta Inláimhsithe

Luaitear sócmhainní seasta inláimhsithe ag costas ceannaithe lúide dímheas carnta. Is mar seo a leanas a ríomhtar dímheas chun costas na sócmhainní seasta inláimhsithe a dhíscríobh thar a saolréanna úsáideacha measta:

Mótarfheithiclí	20%
Daingneáin agus Feistis	33.33%
Trealamh Ríomhaireachta	33.33%
Bogearraí	33.33%

### (E) Aoisliúntas

Forálann Alt 17 den Acht um Fhuinneamh Inmharthana 2002 do bhunú scéimeanna aoisliúntais ag an Údarás. Is scéim de shochar sainmhínithe í an scéim seo chun críche Acht Pinsin 1990. Tá an scéim á feidhmiú ar bhonn riaracháin ag feitheamh ar cheadú an Aire Cumarsáide, Mara agus Acmhainní Nádúrtha, le cead an Aire Airgeadais.

### (F) Cuntas Caipitiúil

Is ionann an Cuntas Caipitiúil agus luach neamhamúchta an ioncaim a úsáideadh le sócmhainní seasta a cheannach.

## Cuntas Ioncaim agus Caiteachais

don bhliain dar chrioch

	Notes	2004	2003
<b>Ioncam</b>		€	€
Deontais Stáit	1	13,868,000	13,250,000
Ioncam ó Chonarthaí AE	2	24,129	(22)
Ioncam Eile	3	227,013	228,386
<b>Ioncam Iomlán</b>		<b>14,119,142</b>	<b>13,478,364</b>
<b>Aistriú chuig Cuntas Caipiteal</b>	14	(39,570)	(133,617)
		<b>14,079,572</b>	<b>13,344,747</b>


## Caiteachas

Tuarastail, Pinsin agus Muirir Ghaolmhara	4	3,055,159	2,437,416
Earcaíocht, Oilíúint & Oideachas	5	147,098	238,076
Fógraíocht agus Cur Chun Cinn	6	1,683,662	1,775,714
Táillí Comhairleoireachta Ginearálta agus Táillí Gairmiúla	7	436,175	379,425
Riarachán Ginearálta	8	793,498	711,689
Clár an Chomhshaoil Thógtha	9	2,964,642	4,519,257
Clár um Thaighde & Forbairt	10	4,587,474	2,517,168
Clár an Fhuinnimh Mhalartaigh	11	817,476	894,251
<b>Caiteachas Iomlán</b>		<b>14,485,184</b>	<b>13,472,996</b>
<b>Easnamh don Bhliain</b>		<b>(405,612)</b>	<b>(128,249)</b>
<b>Barrachas amhail ar an 1ú Eanáir</b>		<b>363,811</b>	<b>492,060</b>
<b>(Easnamh)/ Barrachas amhail ar an 31 Nollaig</b>		<b>(41,801)</b>	<b>363,811</b>

Níl aon ghnóthachan ná aon chailteanas ag an mBord le linn na tréimhse airgeadais seachas na cinn a ndéileálar leo sa Chuntas Ioncaim agus Caiteachais. Is cuid de na ráitis airgeadais seo an Ráiteas faoi Bheartais Chuntasáíochta agus Nótaí 1 go 20.



**Frank Convery**  
An Cathaoirleach



**David Taylor**  
An Príomhfheidhmeannach

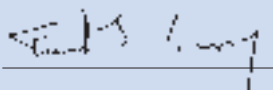
# Fuinneamh Inmharthana Éireann

## Clár Comhardaithe amhail

ar an 31 Nollaig 2004

	Notes	2004	2003
<b>Sócmhainní</b>		€	€
Sócmhainní seasta	12	218,141	178,572
<b>Sócmhainní Reatha</b>			
Banc		581,157	566,977
Féichiúnaithe		103,200	147,394
Réamhíocaíochtaí		9,309	9,506
		<b>693,666</b>	<b>723,877</b>
<b>(Dliteanais Reatha)</b>			
Creidiúnaithe	13	582,133	162,008
Fabhruithe		89,237	94,080
CBL		64,097	103,978
		<b>735,467</b>	<b>360,066</b>
Glansócmhainní/(Dliteanais Reatha)		<b>(41,801)</b>	<b>363,811</b>
<b>Iomlán na nGlansócmhainní</b>		<b>176,340</b>	<b>542,383</b>
<b>Maoinithe ag</b>			
Caipitiúil	14	218,141	178,572
Cuntas Ioncaim agus Caiteachais		(41,801)	363,811
		<b>176,340</b>	<b>542,383</b>

Is cuid de na ráitis airgeadais seo an Ráiteas faoi Bheartais Chuntasaíochta agus Nótaí 1 go 20.



**Frank Convery**  
An Cathaoirleach



**David Taylor**  
An Príomhfheidhmeannach

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch **31 Nollaig 2004**

### 1. Deontais Stáit

Faoi alt 22(1) den Acht um Fuinneamh Inmharthana 2002, soláthraíonn an tAire Cumarsáide, Mara agus Acmhainní Nádúrtha maoiniú don Údarás chun go mbeadh sé in ann a chuid feidhmeanna a chomhlíonadh. Tá an maoiniú a soláthraíodh i rith na bliana faoin gClár Oibriúcháin um Infrastruchtúr Eacnamaíoch agus Sóisialta (ESIOP) comhdhéanta den mhéid seo a leanas:

	2004	2003
Infrastruchtúr Institiúideach	€5,741,000	€5,400,000
Comhshaol Tógtha	€2,805,000	€4,500,000
Taighde & Forbairt	€4,542,000	€2,490,000
Fuinneamh Malartach	€780,000	€860,000
	<b>€13,868,000</b>	<b>€13,250,000</b>

Mhaoinigh Rialtas na hÉireann an Clár Oibriúcháin um Infrastruchtúr Eacnamaíoch agus Sóisialta faoin bPlean Forbartha Náisiúnta 2000-2006, le clár a bhí páirtmhaoinithe ag an Aontas Eorpach. Áirítear ar ioncam an chomhshaoil tógtha méid de €127,000 a íodadh le Gníomhaíocht Fuinnimh thar ceann na Roinne Cumarsáide, Mara agus Acmhainní Nádúrtha (DCMNR). Léirítear an mhír chaiteachais sin freisin i bhfigiúr caiteachais an Chomhshaoil Tógtha i Nóta 9.

### 2. Ioncam ó Chonarthaí AE

Tagann na cistí ó chonarthaí AE ó ghníomhaíochtaí in Éifeachtacht Fuinnimh agus Fuinneamh Inmharthana lena n-áirítear cur chun cinn teicneolaíochta, scaipeadh faisnéise agus comhordú agus bainistiú imeachtaí.

### 3. Ioncam Eile

Is éard atá san ioncam eile ná an teacht isteach ón gcúrsa Bainistíochta Coire-Tí a reachtáladh sa tréimhse. Reachtáladh eachtra débhlíantúil An Seó Fuinnimh freisin laistigh den tréimhse.

	2004	2003
Ioncam ó na Ceardlanna	€57,720	€28,500
Ioncam Eile	€19,293	€4,886
Ranníocaíochtaí don Lá Saor ó Ghluaisteáin	€150,000	€195,000
	<b>€227,013</b>	<b>€228,386</b>

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 4. Luach Saothair agus Costais Phá eile

Tá an tÚdarás ag déanamh na n-asbhaintí riachtanacha ó thuarastail i gcomhair ranníocaíochtaí pinsin, atá san áireamh i gCreidiúnaithe go dtí go dtugtar an scéim chun críche. Ní cheanglaítear ar an Údarás ranníocaíochtaí fostóra a dhéanamh don scéim seo.

	2004	2003
Tuarastail agus Pinsin	€2,380,587	€1,948,935
Ranníocaíocht Fostóra do leas sóisialach	€225,991	€186,554
Ranníocaíochtaí Aoisliúntais Foirne	€130,267	€115,783
Foireann Gníomhaireachta/Conartha	€117,768	€7,440
Sochair Chomhaltaí an Bhoird	€200,546	€178,704
	<b>€3,055,159</b>	<b>€2,437,416</b>

### 5. Earcaíocht, Oiliúint agus Oideachas

	2004	2003
Earcaíocht & Oiliúint Foirne	€126,199	€222,181
Síntiúis agus Foilseacháin Foirne	€17,826	€11,089
Cruinnithe Foirne	€3,073	€4,806
	<b>€147,098</b>	<b>€238,076</b>

### 6. Fógraíocht agus Cur Chun Cinn

	2004	2003
Costais Fhógraíochta	€468,410	€672,123
Priontáil & Dearadh	€356,949	€332,529
Urraíocht	€271,288	€318,419
Caidreamh leis an bPreas	€171,914	€121,906
Costais na gCeardlann	€171,740	€105,153
Ábhair	€117,230	€121,256
Gníomhaíochtaí Cur Chun Cinn Ginearálta	€76,106	€70,234
Forbairt Láithreáin Ghréasáin	€50,025	€34,094
	<b>€1,683,662</b>	<b>€1,775,714</b>

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch **31 Nollaig 2004**

### 7. Táillí Comhairleoireachta Ginearálta agus Táillí Gairmiúla

	2004	2003
Seirbhísí Fuinnimh Inmharthana	€21,875	€18,887
Forbairt Eagraíochtúil	€142,257	€91,394
Caidreamh Poiblí & Fógraíocht	€30,135	€17,434
Tionscal & Coire	€128,658	€101,500
Clár na Scoileanna	€18,371	€13,985
Idirchaidreamh le Gníomhaireachtaí Áitiúla Fuinnimh	€11,773	€61,069
Aonad Tacaíochta Staitistiúil do Bheartas Fuinnimh	€51,777	€49,679
Eile	€31,329	€25,477
	<b>€436,175</b>	<b>€379,425</b>

### 8. Riarachán Ginearálta

	2004	2003
Muirir Fhoirgnimh & Seirbhísí Eile	€245,133	€243,445
Taisteal agus Cothú - Foireann	€204,495	€179,583
- An Bord	€19,302	€20,013
Deisiúcháin agus Cothabháil	€153,542	€93,034
Táillí Iniúchta - Inmheánach	€35,054	€30,582
- Seachtrach	€15,000	€10,000
Árachas & Dlíthiúil	€43,821	€56,277
Teileafón	€8,946	€9,712
Páipéarachas	€16,581	€24,534
Eile	€51,624	€44,509
	<b>€793,498</b>	<b>€711,689</b>

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 9. Comhshaoil Tógtha

Tá trí chomhpháirt ar leithligh ag an bhfobheart seo, a bhfuil mar aidhm aige feidhmíocht fuinnimh an stoc tógála náisiúnta a fheabhsú:

- > díriú an Clár Earnála Poiblí ar acmhainní a chur ar fáil le haghaidh feabhsuithe i bhfoirgnimh phoiblí, rud a chiallaíonn go mbeidh an earnáil phoiblí mar dhea-eiseamlár;
- > an aidhm atá le Rátáil Fuinnimh Bhaile ná córas rátála fuinnimh a fhorbairt chun go mbeidh éifeachtacht fuinnimh ina fachtóir do dhaoine agus iad ag déanamh cinntí maidir le tithe a fháil ar cíós nó a cheannach;
- > pléann Tithíocht Lucht Beagioncaim gnéithe a bhaineann le héifeachtacht fuinnimh i dtithe ina mbíonn teaghlaigh ag maireachtáil ar bheagán breosla.

	2004	2003
<b>Tithíocht Lucht Beagioncaim:</b>		
Deontais a eisíodh	€728,492	€555,268
Oibriúchán/Cur Chun Cinn an Chláir	€216,940	€236,242
<b>Clár na hEarnála Poiblí:</b>		
Deontais a eisíodh	€1,807,490	€3,618,226
Oibriúchán/Cur Chun Cinn an Chláir	€24,449	€27,408
Staidéir/Tuairiscí Coimisiúnaithe	€159,739	€0
<b>Rátáil Fuinnimh Bhaile</b>		
Staidéir/Tuairiscí Coimisiúnaithe	€0	€65,340
Oibriúchán/Cur Chun Cinn an Chláir	€27,532	€16,773
	<b>€2,964,642</b>	<b>€4,519,257</b>

Áirítear ar ioncam an chomhshaoil tógtha méid de €127,000 a íocadh le Gníomhaíocht Fuinnimh thar ceann na Roinne Cumarsáide, Mara agus Acmhainní Náidúrtha (DCMNR). Léirítear an mhír chaiteachais sin freisin i bhfigiúr caiteachais an Chomhshaoil Tógtha i Nóta 1.

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 10. Taighde agus Forbairt

Tugann an fobheart Taighde agus Forbartha tacaíocht d'fhorbairt agus do chur i bhfeidhm cleachtais fuinnimh inmharthana i dtithe Éireannacha. Tacaíonn sé freisin le tionscadail a mbíonn mar aidhm acu méadú a dhéanamh ar an úsáid a bhaintear as fuinneamh inmharthana, trí theicneolaíochtaí, táirgí, cleachtais agus faisnéis a ghiniúint agus a chur i bhfeidhm.

	2004	2003
<b>Teach na Todhchaí:</b>		
Deontais a eisíodh	€810,468	€418,863
Staidéir/Tuairiscí Coimisiúnaithe	€121,562	€0
Oibriúchán/Cur Chun Cinn an Chláir	€56,319	€64,043
<b>Earraí Athnuaithe:</b>		
Deontais a eisíodh	€1,458,628	€500,133
Staidéir/Tuairiscí Coimisiúnaithe	€886,835	€537,348
Tacaíochta Oideachasúil	€183,642	€0
Oibriúchán/Cur Chun Cinn an Chláir	€475,189	€431,914
<b>Tionscal:</b>		
Deontais a eisíodh	€0	€238,766
Oibriúchán/Cur Chun Cinn an Chláir	€494,831	€326,101
<b>Iompar</b>		
Deontais a eisíodh	€100,000	€0
	<b>€4,587,474</b>	<b>€2,517,168</b>

### 11. Fuinneamh Malartach

Forálann an beart seo maoiniú sna trí réimse seo a leanas: Infrastruchtúr Leictreachais agus Teasa €6,400 an clár pólótach CHP/teas limistéir €134,560 agus an Oifig um Fhaisnéis ar Fhuinneamh Inathnuaithe (REIO) atá mar sheirbhís náisiúnta de chuid an Údaráis a bunaíodh le húsáid acmhainní fuinnimh inathnuaithe a chur chun cinn, €676,516.

	2004	2003
Deontais a eisíodh	€717,188	€857,739
Staidéir/Tuairiscí Coimisiúnaithe	€88,831	€0
Oibriúchán/Cur Chun Cinn an Chláir	€11,457	€36,512
	<b>€817,476</b>	<b>€894,251</b>

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 12. Sócmhainní Seasta

	Trealamh Ríomhaireachta agus Bogearraí €	Daingneáin & Feistis €	Mótarfheithiclí €	Iomlán €
<b>Costas:</b>				
Amhail ar an 1 Eanáir 2004	133,868	50,721	40,750	225,339
Breiseanna	123,162	10,766	0	133,928
Diúscairtí	2,958	0	0	2,958
Amhail ar an 31 Nollag 2004	254,072	61,487	40,750	356,309
<b>Dímheas:</b>				
Amhail ar an 1 Eanáir 2004	32,061	7,235	7,471	46,767
Muirear don Bhliain	62,315	20,936	8,150	91,401
Amhail ar an 31 Nollag 2004	94,376	28,171	15,621	138,168
<b>Glanmhéid an Leabhair:</b>				
<b>Amhail ar an 31 Nollag 2004</b>	<b>159,696</b>	<b>33,316</b>	<b>25,129</b>	<b>218,141</b>
<b>Amhail ar an 31 Nollag 2003</b>	<b>101,807</b>	<b>43,486</b>	<b>33,279</b>	<b>178,572</b>

### 13. Creidiúnaithe

	2004	2003
Ranníocaíochtaí aoisliúntais Foirne a Coimeádadh	€291,660	€161,393
Creidiúnaithe Trádála	€290,473	€65
Eile	€0	€550
	<b>€582,133</b>	<b>€162,008</b>

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 14. Cuntas Caipitiúil

	2004	2003
larmhéid Tosaigh	€178,572	€44,955
<b>Ón gCuntas Ioncaim &amp; Caiteachais</b>		
Chun Breiseanna Sócmhainní Seasta a mhaoiniú lúide Diúscairtí	€130,970	€176,771
Amúchadh ag teacht le Dímheas na Sócmhainní	(€91,401)	(€43,154)
	€39,569	€133,617
<b>larmhéid ag Deireadh na Tréimhse</b>	<b>€218,141</b>	<b>€178,572</b>

### 15. Fostaithe

#### Foireann Bhuan

Ba é 12 meán na bhfostaithe buana le linn na tréimhse.

#### Foireann ar Conradh

Ba é 30 duine meán na n-acmhainní foirne ar conradh a d'fhostaigh Fuinneamh Inmharthana Éireann le linn na tréimhse.

### 16. Áitribh

Tá Údarás na hÉireann um Fhuinneamh Inmharthana lonnaithe, faoi cheadúnas, i bhfoirgnimh ar le Fiontraíocht Éireann iad.

### 17. FRS17

Feidhmíonn Fuinneamh Inmharthana Éireann scéim aoisliúntais shochair shainmhínithe don fhoireann. Tá an t-údarás ag déanamh na n-asbhaintí riachtanacha ó thuarastail i gcomhair ranniocaíochtaí pinsin, atá á gcoimeád ach nach bhfuil aitheanta mar ioncam. Tá siad san áireamh i gCreidiúnaithe agus tabharfar ar ais don Roinn Cumarsáide, Mara agus Acmhainní Nádúrtha iad mar leithreas i gcabhair i 2005. Íoctar teidlíochtaí Aoisliúntais ag eascairt ón scéim as ionam reatha agus cuirtear de mhuipear iad ar an gCuntas Ioncaim agus Caiteachais, glan ó ranniocaíochtaí aoisliúntais na bhfostaithe, sa bhliain ina mbíonn siad iníochta.

D'éisigh Bord na gCaighdeán Cuntasaíochta caighdeán nua cuntasaíochta, Financial Reporting Standard No 17 – Retirement Benefits (FRS 17) i Samhain 2000. Níl sé éigeantach an caighdeán nua a chomhlíonadh go dtí an bhliain airgeadais 2005. Faoi réir an tsocraithe athraithe a leag an caighdeán síos, áfach, tá sé de dhualgas ar Fhuinneamh Inmharthana Éireann (SEI) aon sócmhainní (más ann dóibh) agus aon dliteanas a bhaineann le scéimeanna pinsin a chuid fostaithe a nochtadh, i bhfoirm nóta ar na cuntais. Tá na torthaí thíosluaite bunaithe ar luacháil achtúireach ar na dliteanais i leith fhoireann Fhuinneamh Inmharthana Éireann (SEI) amhail ar an 31 Nollaig 2004. Rinneadh an luacháil seo agus úsáid á baint as modh an aonaid theilgthe.

Is iad na boinn tuisceana airgeadais a úsáideadh chun dliteanais na scéime a ríomhadh chun críche FRS 17 ná:

	2004	2003
Bonn Tuisceana ráta lascaine	5.5%	6%
Foshuíomh de Mhéadú ar Thuarastal	4%	4%
Foshuíomh de Mhéadú ar Phinsean	4%	4%
Boilsciú Praghsanna	2%	2%

Bunaithe ar na foshuíomh seo agus ag baint úsáide as modh an aonaid theilgthe a shainordaítear in FRS17, measadh go raibh luach **€5.0m** ar na dliteanais fabhrúithe i leith fhoireann Fhuinneamh Inmharthana Éireann (SEI) amhail ar an 31 Nollaig 2004. (i gcomparáid le **€3.5m** amhail ar an 31 Nollaig 2003).

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch 31 Nollaig 2004

### 17. FRS17 (ar lean)

Toisc go bhfuil an scéim neamh-mhaoinithe níl aon sócmhainní á gcoimeád i leith dliteanais pinsin fhabhrúithe a bhaineann le foireann Fhuinneamh Inmharthana Éireann (SEI).

Dá mbeadh riachtanais FRS 17 glactha go hiomlán i 2004 bheadh an méid seo a leanas léirithe sna ráitis airgeadais:

#### Is í anailís ar an méid a chuirfí de mhuirear ar bhrabús oibriúcháin faoi FRS 17 ná:

Costas seribhíse reatha	€440,000
Costas seribhíse roimhe seo:	-

---

Muirear oibriúcháin iomlán	€440,000
----------------------------	----------

---

#### Is í anailís ar an méid a bheadh creidiúnaithe chuig ioncam airgeadais eile ná:

Ús ar dhliteanais scéime pinsin	(€210,000)
---------------------------------	------------

#### Anailís ar an méid a bheadh aitheanta i ráiteas gnóthachain agus cailteanais aitheanta iomlán (STRGL):

Gnóthachain agus cailteanais a bheadh ann ag eascairt ó dhliteanais na scéime:	(€160,000)
Athruithe sna boinn tuisceana atá mar bhunús do luach reatha dliteanais na scéime:	(€670,000)

Gnóthachan/(cailteanas) achtúireach aitheanta sa STRGL:	(€830,000)
---	------------

#### Gluaiseacht san easnamh le linn na bliana

Easnamh ag tús na bliana:	(€3,500,000)
Costas seirbhíse reatha:	(€440,000)
Ús ar dhliteanais scéime	(€210,000)
Gnóthachan/(cailteanas) achtúireach aitheanta sa STRGL	(€830,000)

---

Easnamh sa scéim ag deireadh na bliana	(€4,980,000)
--	--------------

---

## Nótaí a ghabhann leis na Ráitis Airgeadais

don bhliain dár críoch **31 Nollaig 2004**

---

### 18. Ceangaltais

Meastar go mbeidh íocaíochtaí de €16,103,789 le déanamh sa todhchaí de bharr ceangaltas a bhaineann le scéimeanna tacaíochta éagsúla.

### 19. Baill an Bhoird – Leasanna a Nochtadh

Ghlac an Bord le nósanna imeachta faoi réir Alt 18 den Acht um Fuinneamh Inmharthana 2002.

### 20. Ceadú na Ráiteas Airgeadais

Cheadaigh an Bord na ráitis airgeadais an 31ú Márta 2005.