Regulatory Impact Statement

1. Proposal to introduce minimum energy performance standards for computers, and monitors, and energy rating labelling for monitors.

Agency Disclosure Statement

- 2. This Regulatory Impact Statement has been prepared by the Ministry of Business, Innovation and Employment (MBIE). It provides an analysis of options to improve the energy performance of computers and monitors, through the application of standards and labelling, that are sold on the New Zealand market. The proposal covers laptops (notebooks), netbooks, integrated and desktop computers, small-scale servers (now referred to collectively as "computers"), and monitors.
- 3. The analysis covers:
 - Current and forecast impacts of computers and monitors on electricity demand
 - Barriers to consumers purchasing more efficient computers and monitors
 - The impact on consumers of purchasing more efficient models
 - The impact on suppliers and manufacturers of requiring more efficient models (including the cost of compliance).
- 4. The recommended option will align New Zealand requirements with the minimum energy performance standards (MEPS) and energy labelling standards due to be introduced in Australia on 1 April 2013. The intention is to incorporate the new requirements into regulation by April 2013, using joint Australian and New Zealand standards that draw on international standards. Aligning product regulation between the two countries contributes to the objectives of the Trans-Tasman Mutual Recognition Arrangement (TTMRA) and the Closer Economic Relations (CER) Agreement.
- 5. This proposal has been developed within the parameters of a joint work plan with Australia, which investigates the introduction of measures that are a variation on MEPS and/or energy labelling. This effectively rules out some alternative options from consideration. The variations include different timeframes for introduction, energy efficiency levels, or whether to introduce voluntary or mandatory standards. Voluntary ENERGY STAR endorsement labelling for computers and monitors has been available in New Zealand since 2009.
- 6. The proposed measures are not expected to restrict competition or impose significant compliance costs. Feedback from industry and testing indicate that suppliers can easily source compliant products. "Deemed-to-comply" provisions are proposed for some aspects of the MEPS to reduce the compliance costs for assembling limited quantities of certain computer models. Some exceptions will apply for specialist equipment or can be applied for on certain grounds.
- 7. Products that have been manufactured in New Zealand, or imported, before the date the new requirements take effect can still be sold. Industry will incur administration costs to register their products (but no registration fee) and may incur costs to test their product.

(Signature of person)

(Date)

Status Quo and Problem Definition

- 8. Energy consumed through the use of computers and monitors in homes is estimated at 364 gigawatt hours (GWh)¹ per year or three percent of New Zealand's residential electricity demand in 2011². This makes computers and monitors one of the largest end uses of residential electricity that is not already covered by energy efficiency regulation. For business, computers and monitors are estimated to account for up to seven percent of electricity use in commercial office buildings³ and are estimated to consume 988 GWh per year, or 11 percent of commercial electricity demand⁴.
- 9. There is limited data available on the stock of computers in New Zealand, so for these purposes it has been assumed that it is proportional to the number in Australia. In 2006, there were an estimated 24 million computers in use in Australia⁵, roughly equally divided between the three sectors: residential, commercial and government. It is therefore conservatively estimated that there are about are about 4.8 million computers in New Zealand.
- 10. Best available information suggests that by 2020 the number of computers will double to around 53.5 million in New Zealand and Australia, and the number of computer monitors will grow to 33 million. The amount of electricity needed to power this equipment will necessarily increase as well.
- 11. There is the trend towards the use of typically more efficient laptops (notebooks) and netbooks, instead of desktop computers. Liquid crystal display (LCD) monitor technology is also replacing cathode ray tube (CRT) technology in virtually all applications, which also offers energy efficiency improvements. However, the trend towards having much larger and/or multiple monitors more than offsets the efficiency gains of the new technologies.
- 12. While the energy efficiency of computers and computer monitors has improved with time, there are relatively simple and cost effective means of further increasing their energy efficiency that are not being adopted.
- 13. Major economies, such as China, Canada, the European Union (EU), Japan and the United States of America (USA), have voluntary standards in place to improve the energy efficiency of computers and monitors, usually based on ENERGY STAR⁶ criteria, as well as government procurement requirements⁷. These measures have been successful in increasing the proportion of higher energy efficiency products (up to 50 percent in the USA and EU⁸) in the global market due to the relative size of these markets.

¹ Proposed minimum energy performance standards and labelling for computers and monitors, Energy Efficiency and Conservation Authority, September 2011, available at

www.eeca.govt.nz/sites/all/files/proposed-standards-computers-oct-2011.pdf

² Residential demand was 12873 GWh in 2011. Source: Electricity Information Portal, Ministry of Business, Innovation and Employment, available at: www.med.govt.nz/sectors-

industries/energy/energy-modelling/data/electricity

³ E3 Decision Regulatory Impact Statement: Proposed Minimum Energy Performance Standards for Computers, Proposed Minimum Energy Performance Standards and Energy Labelling for Computer Monitors, September 2012, available at www.energyrating.gov.au

⁴ Commercial (non-industrial) demand was 9,142 GWh in 2011, refer footnote 2 for source

⁵ 'Projected Impact of the Equipment Energy Efficiency Program to 2020' (Wilkenfeld and Associates) January 2009, page 25

⁶ A US-based international endorsement scheme to promote energy efficient products

⁷ Usually based on ENERGY STAR, but often with some additional environmental attributes that cover the full lifecycle of electronic products (refer http://www.epeat.net/)

⁸ http://mappingandbenchmarking.iea-4e.org/shared_files/232/download

- 14. Recent testing⁹ shows that these higher efficiency products are available in New Zealand. A sample of 15 computer models available here were tested and found to meet or exceed ENERGY STAR requirements, even though they were not necessarily identified as being ENERGY STAR qualified at time of purchase. The models tested covered a range of price points, and included models suitable for different users, from basic through to business and gaming. Testing on monitors has not been done to the same extent, but it is expected that there are also a range of models available that meet ENERGY STAR requirements¹⁰.
- 15. ENERGY STAR® endorsement labelling has been available in New Zealand for computers and monitors since 2009. ENERGY STAR typically identifies the top 25 percent most energy efficient products, but it does not provide an indication of running costs, and does not allow consumers to compare efficiency between models.
- 16. This means that consumers lack the means to compare how much electricity different computers and monitors use, and how much they cost to operate, and that they lack information on the energy performance of products that are not ENERGY STAR qualified. Energy efficiency performance varies widely across computers and monitors with roughly equivalent features, yet the price of a computer or monitor is not linked to its electricity use.
- 17. The lack of a price signal and energy efficiency information means that consumers do not tend to consider running costs when buying a computer. This means that there is limited consumer awareness of and demand for energy efficient computers and no incentive for industry to stop importing low efficiency models to New Zealand.
- 18. While efficient products are available, less efficient models will continue to be made available here while they are available on the global market. There is a risk that more inefficient computers and monitors could be dumped here if New Zealand does not introduce MEPS and labelling requirements at the same time as Australia. Regulatory misalignment with Australia would also undermine the principles of the TTMRA and CER Agreement.

Recent decisions and trans-Tasman issues

- 19. Cabinet endorsed the Equipment Energy Efficiency (E3) forward work plan in August 2009 [EGI Min (09) 17/5 refers]. This is a joint work plan for Australia and New Zealand to develop/adopt common energy efficiency standards for products sold on both markets. The work plan includes investigation of MEPS and energy rating labels for computers and monitors and a range of other products.
- 20. MEPS and energy labelling standards become mandatory in New Zealand when they are incorporated into the Energy Efficiency (Energy Using Products) Regulations 2002 (the Regulations). MEPS and/or labelling requirements currently apply to a range of household products including household fridges and freezers, air conditioners / heat pumps, televisions and compact fluorescent lamps.

Existing energy efficiency measures

21. In 2009, the Energy Efficiency and Conservation Authority (EECA) launched an ENERGY STAR specification for computers in New Zealand. The ENERGY STAR mark provides independent verification of performance claims, but as a voluntary scheme that only

⁹ Energy Efficiency and Conservation Authority product testing of laptops, integrated and desktop computers, July 2012

¹⁰ A factor in this also is that the industry has been anticipating the introduction of MEPS

applies to high performing models made by those manufacturers who participate in the programme. It is included as a criterion for government procurement of information and communications technology (ICT) equipment. Currently the ENERGY STAR version 5 specification is used, but a move to the higher efficiency version 6, which will be complementary to this MEPS proposal, is planned for May 2013.

Emissions Trading

- 22. The Emissions Trading Scheme (ETS) is currently the primary intervention to reduce greenhouse gas emissions across all sectors of the economy, including the energy sector. The ETS places a price on carbon emissions in the energy sector, and it is already a feature of investment decisions and a factor in improving the competitiveness of low emissions alternatives.
- 23. Among other impacts, the ETS gives electricity consumers an incentive to reduce their electricity consumption. However, it is unlikely that this would lead directly to improvements in the energy efficiency of computers (computer manufacturers are not subject to the ETS), or enable consumers to identify products that use less electricity, without other changes in the market (such as the consistent application of MEPS and labelling requirements).
- 24. While the ETS has resulted in increases in the price of electricity, it is complicated for customers to calculate the lifetime running costs of a computer or monitor, and few customers are willing to do so.

Objectives

25. The main objectives of the proposal are to:

- maintain consistent standards with Australia, with respect to commercially traded goods, in accordance with the Trans-Tasman Mutual Recognition Arrangement (TTMRA) and Closer Economic Relations (CER) Agreement (in order to realise the wider economic benefits that come from closer economic relations with Australia)
- improve energy performance in order to reduce energy consumption, energy costs and energy-related greenhouse gas emissions from computers and monitors to below the level projected under a business as usual scenario
- provide consumers with clear, consistent information about the energy performance and running costs of monitors, and
- complement existing measures to promote energy efficient computers and monitors.

Options

- 26. The preferred option is to introduce MEPS for computers, and monitors, and energy rating labelling for monitors from 1 April 2013. The mandatory requirements would cover laptops (notebooks), netbooks, integrated and desktop computers, small-scale servers and monitors, and would set out:
 - MEPS for computers based on current ENERGY STAR specifications, and including power management and additional graphics allowances
 - MEPS for monitors, also based on current ENERGY STAR specifications
 - a method for testing the energy use of computers and monitors (using the ENERGY STAR test method developed in the United States of America and used internationally)
 - an energy rating label for monitors to allow consumers to compare the energy use and related costs of different models on the shop floor

- 'deemed-to-comply' provisions for small product runs (less than 200 computers per year), and use of high efficiency components as an alternative to testing, to reduce compliance costs
- a requirement that small scale servers (category A or B) meet regulatory targets in their idle and off modes.
- 27. The new standards and labelling requirements will apply to all computers and monitors available for sale in New Zealand, but excluding:
 - gaming consoles without a keyboard
 - screens larger than 76.2 cm
 - any computer monitor with a television tuner (as these will be covered by the television MEPS).
- 28. The requirements for computers are set out in the standards AS/NZS 5813.1:2012 and AS/NZS 5813.2:2012, and the requirements for monitors are set out in AS/NZS 5815.1:2012 and the draft AS/NZS 5815.2 (to be published shortly).
- 29. The existing transitional provisions in New Zealand would apply to this proposal that is, any computer or monitor manufactured in, or imported into, New Zealand before 1 April 2013 could still be sold without meeting the new requirements.
- 30. It is also proposed that the MEPS levels be reconsidered in about two years, with the intention of increasing efficiency levels. This would be subject to a market review, confirmation that local industry will have adequate lead-in time to make the transition, and Cabinet approval.

Alternative Options

- 31. This proposal has been developed within the parameters of the E3 forward work plan, which effectively rules out some alternative options from consideration. All the options investigated for E3 work plan items are a variation on MEPS and / or energy labelling. The variations considered may include different timeframes for introduction, energy efficiency levels or product coverage, or whether to introduce voluntary or mandatory standards.
- 32. The alternative options to introducing mandatory MEPS for computers and monitors and labelling requirements for monitors are the status quo (business as usual), or introducing the requirements on a voluntary basis.
- 33. Energy rating labelling was proposed for computers in Australian consultation in 2007. The proposal was not recommended due to industry concerns, the difficulty in differentiating efficiency of models, and possible confusion with the proposed monitor label. In addition, the label could lose effectiveness because components can be added to a computer after manufacture or importation (i.e. post-labelling) that can affect its energy efficiency. The option is therefore not considered further for New Zealand.

Business as usual

34. Business As Usual (BAU) is a continuation of the ENERGY STAR programme, and its inclusion as a criterion for government ICT procurement. The existing provision of energy efficiency information through EECA's EnergyWise website and other information resources would also continue. This includes information on how to purchase energy efficient products and how to manage the energy consumption of products, including computers. 35. BAU is used as a base scenario in the cost benefit analysis discussed below in the Impact Analysis section. It is not the preferred option. It illustrates the effect of market failure, which results in energy efficiency being lower than is readily and cost effectively achievable (the 'optimal' level). The energy inefficiency is measured in terms of avoidable electricity consumption and greenhouse gas emissions.

Voluntary standards and labelling

- 36. Joint Australia/New Zealand Standards will be published as part of Australia's proposed regulation to set test methods and performance levels for computers and monitors. These could be used as voluntary standards in New Zealand, which would be an advancement on the current voluntary arrangements.
- 37. However, voluntary standards would be less cost-effective and less effective in addressing the problem than mandatory requirements. Oversight of the application of the voluntary standards would be need for it to be measurably successful. A process would need to be put in place to verify claims of compliance, along with effective enforcement and sanctions if claims are not substantiated. The standards would need to be a visible as a point of difference to the consumer (e.g. through certification or similar).
- 38. Unless a significant number of suppliers were to participate in a voluntary programme, only a limited proportion of the products available would be covered. The USA 20-year experience with the voluntary ENERGY STAR scheme, supported by a government procurement requirement, indicates that it can result in fairly large availability of compliant products. ENERGY STAR products account for over 50 percent of the market there¹¹. However, there are still a large number of energy inefficient computers on the USA market, and it unlikely that government procurement requirements in Australia and New Zealand would have a similar impact given our relatively small size. It would therefore achieve fewer benefits than the preferred option while incurring similar administrative costs.
- 39. The same is true for a voluntary energy rating label. While this would allow consumers to compare the energy performance and running costs of different models, only the better performing models tend to get labelled under a voluntary scheme. This limited application does not give consumers a consistent basis for comparison and would mean that consumers would not be able to distinguish between poor and average performing products. It would therefore not be an effective comparative label.

Impact analysis

- 40. The major benefit of the proposal is the removal of the supply of poorer energy performing computers and monitors from the market. It would also incrementally improve purchasing decisions regarding monitors by providing reliable and accurate information (star ratings and annual energy use).
- 41. The cost benefit analysis¹² is based on a business as usual (BAU) scenario, that is, MEPS and labelling requirements are not introduced. It effectively includes voluntary standards, as ENERGY STAR endorsement labelling is already available.

¹¹ http://mappingandbenchmarking.iea-4e.org/shared_files/232/download

¹² E3 Decision Regulatory Impact Statement: Proposed Minimum Energy Performance Standards for Computers, Proposed Minimum Energy Performance Standards and Energy Labelling for Computer Monitors, September 2012

- 42. For comparison purposes, the BAU case recognises and incorporates reductions in energy consumption that would occur in the absence of regulatory action. This includes:
 - trends to increasing use of laptops (notebooks) and LCD/LED monitors
 - allowances for technological improvements, and
 - increased use of power management and improved awareness of the energy consumption of these products.
- 43. In the office sector, power management is assumed to reduce energy consumption of individual computers and computer monitors by 5 percent between 2010 and 2011, increasing to a 15 percent reduction in 2014, and remaining at this level through to 2020. In the residential sector, this is assumed to be 5 percent less than 2010 in 2011, peaking at 17 percent in 2014, and remaining at this level through to 2020.

Summary of Costs and Benefits

- 44. The benefits are assessed using an estimate of the number of computers and monitors that would be purchased between April 2013 and the end of 2020 that would not comply with the MEPS. The benefits extend beyond 2020 until all of these products are retired from use in 2025. The analysis does not include sales of compliant products as their energy usage under the BAU and 'introduction of MEPS' cases are the same. Total benefits do not include any reduced investment in new generation that could arise from reduced electricity demand.
- 45. The total cost is based on an estimate of a price increase from any increased product design and compliance costs that are assumed to be passed on to the consumer. The price increase is discussed in the 'Impacts on consumer' section. It does not include taxpayer costs (discussed below), or the cost to electricity retailers of lost revenue owing to a reduction in the electricity demand from computers¹³. The value of this lost revenue would be somewhat less than the savings consumers make on their electricity bills, and is off-set by the benefits of reduced capital expenditure on additional generation capacity (from reduced energy use and peak demand).
- 46. Table 1 below sets out the results of the cost benefit analysis. It is estimated that, at a six percent discount rate¹⁴, the proposal will provide net benefits of around \$151 million in present value terms, achieving a net benefit ratio of 2.77. The proposal will save an estimated 1,814 GWh in energy and 720 kt of greenhouse gas emissions. The total cost of the proposal is estimated at \$85 million.

¹³ Refer page 56 of http://www.energyrating.gov.au/wp-

content/uploads/Energy_Rating_Documents/Library/Computers_and_Peripherals/201011b-supp-infoconsult-ris-computers.pdf

¹⁴ A five percent discount rate is usually used to account for the value of long term environmental and social benefits associated with energy efficiency. In this case, six percent was used due the large proportion of computer and monitors used for commercial purposes.

Table 1: Summary of Costs and Benefits (at present value)

Cumulative 2013 to 2025	\$ million (2012)		
Discount rate	6%	8%	10%
Total benefit ¹⁵	237.1	212.5	191.2
Total cost	85.6	79.8	74.7
Net benefit	151.5	132.7	116.5
Benefit Cost Ratio	2.77	2.66	2.56
Energy Saved GWh			1,814
Greenhouse gas emissions reductions		7	20 kt CO ₂ -e

47. The \$237 million worth of avoided energy costs achieved through implementing the proposal will more than offset the estimated additional product costs of \$85 million.

Costs to the taxpayer

- 48. The addition of computers and monitors to the existing MEPS programme will result in marginal increases in government compliance and monitoring costs, estimated at \$0.3 million over the assessment period. These costs include:
 - administration of the programme by government officials (salaries and overheads, attendance at E3 Committee and Standards meetings, etc.)
 - maintenance of registration and approval capability
 - random check testing to protect the integrity of the programme
 - production of leaflets and other consumer information, and
 - consultant costs for Standards development, research, etc.
- 49. Most of these costs are met through E3 Programme funding, which is estimated to increase by A\$150,000 per year. As the programme is jointly funded with Australia, this will result in an increase in the amount New Zealand contributes to the programme (estimated at about NZ\$25,000). The remaining increase to EECA's compliance and monitoring costs is estimated at \$20,000 per year.

Impacts on consumers

- 50. Consumers could potentially face an initial increase in the retail price of about \$30 per desktop computer, \$15 per notebook computer and \$5 per computer monitor (typically less than 1.5 percent of the total average retail price). This is expected to decline over time. Modelling suggests that by 2020 there is no real increase in retail price as a result of MEPS requirements other than the cost of new technologies and features. However, in practice, retail prices may not be affected because suppliers are operating in a competitive market and will have had time to adjust their inventories to the proposed MEPS.
- 51. Regardless, consumers are expected to recoup any additional upfront costs in the form of reduced running costs of their computer systems. The higher retail prices represent a

¹⁵ Benefits are estimated based on the savings consumers would make on their electricity bill using the average retail price and commercial price for electricity proportionate to consumption. Alternative methodologies are currently being explored to estimate national benefits for future MEPS and labelling proposals based on the avoided cost of building new generation. Taking this approach, the benefits are estimated at \$179.6 million. This figure is not directly comparable to the present value figures presented in Table 1.

potential aggregate upfront cost to consumers of \$22m. This will be fully offset by the energy savings over the five year life of the product.

Business compliance costs

- 52. Approximately 35 50 importers and assemblers of computers will be affected by this proposal. It is the supplier of the product that is responsible for compliance with MEPS and labelling requirements, so they will need to alter manufacturing in the country-of-origin and/or change ordering practices to ensure only compliant products are imported. It is assumed that research and development costs will not be significant as the MEPS levels are set at internationally recognised and accepted levels, so compliant product is already easily attainable from overseas. Importers, manufacturers and suppliers have been aware of the proposal since consultation began in 2007 (discussed below), and have been informed of progress to date. Recent testing¹⁶ shows that compliant product is already being imported into New Zealand.
- 53. Businesses will incur ongoing compliance costs as each new model will need to be registered. Table 3 below sets out the indicative compliance costs. Prudent suppliers will organise verification testing to ensure the models from overseas meet the requirements. In order to minimise compliance costs, the MEPS contains 'deemed-to-comply' provisions to effectively exempt computers with small production runs. There are also exemptions for equipment used for medical or similar purposes and exceptions can also be applied for in certain circumstances.
- 54. Businesses will also incur ongoing costs to ensure they are aware of legislative and regulatory requirements and maintaining records and other paperwork, including the provision of annual sales data. All these costs have been included in the modelling. These costs will be marginal for New Zealand businesses once the new requirements are introduced in Australia because virtually all products are supplied to both markets. It is estimated that the cost for computers unique to the New Zealand market would be about \$50,000 per year for components, testing and registration, which is \$0.5 million to 2025.

Product	A\$150 – A\$280 Fee	Depending on registering authority used
registration	charged in Australia only	New Zealand product registration is free
Standards	\$180 – 260	Typical cost of a two-part standard
Testing	\$625 – \$1, 250	Typical cost of test at National
costs		Association of Testing Authorities,
(computers)		Australia (NATA) or International
		Accreditation New Zealand (IANZ)
		accredited lab. In house test reports are
		acceptable for product registration
Testing	\$1,000	Typical cost of test at an accredited lab.
costs		In house test reports are acceptable for
(monitors)		product registration

Consultation

55. Preliminary discussions about the potential of MEPS and labelling requirements for computers and monitors took place in November 2007 with industry stakeholders in Auckland. EECA met with local industry representatives to discuss the proposal in November 2011 following the release of a discussion paper in September 2011.

¹⁶ Energy Efficiency and Conservation Authority product testing of laptops, integrated and desktop computers, July 2012

- 56. Those who attended the meeting (local importers and assemblers) were confident they could meet the MEPS, however, one submitter expressed concerns about timing, and computer labelling. Since then, the timeframe for implementation has been extended and submitters have been assured that the proposed labelling requirements are for monitors only (not computers).
- 57. Submitters on the discussion paper were concerned about increased compliance costs, and that the requirements need to able to keep up with new technologies, but had no further issues with the proposal after more information was provided. It was noted that the intention is to keep up with new technologies by revising the standard in the future.
- 58. The proposal is consistent with New Zealand's international obligations under the World Trade Organisation's Technical Barriers to Trade Agreement and has been notified through the WTO TBT notification process. The Australia and New Zealand Standard applies equally to products produced locally and overseas.
- 59. Stakeholders have also had the opportunity to participate in the development of the standards through representation on standards committees, and when the draft standards are released for public comment.

Conclusions and Recommendations

- 60. The introduction of MEPS for computers and monitors, and energy rating labelling for monitors will provide \$163 million in net benefits from reduced energy costs. The energy savings are estimated at 1,814 GWh, with an associated 720 kilo tonne reduction in greenhouse gas emissions. The economic and environmental benefits are significant and would reduce national energy demand. The introduction of these requirements will be complementary to the existing ENERGY STAR programme.
- 61. Aligning standards with Australia will uphold the principles of the Australia New Zealand Closer Economic Relations Trade Agreement and the Trans-Tasman Mutual Recognition Arrangement (TTMRA). Maintaining alignment will also reduce business compliance costs. Accordingly, we recommend that the proposed MEPS for computers, and MEPS and labelling for monitors are adopted.

Implementation

- 62. An amendment will need to be made to the Energy Efficiency (Energy Using Products) Regulations 2002 to incorporate the relevant Australia/New Zealand Standards. The standards are: AS/NZS 5813.1:2012, AS/NZS 5813.2:2012, AS/NZS 5815.1:2012 and the draft AS/NZS 5815.2 (to be published shortly).
- 63. The industry is already aware of the intention to introduce these requirements both in New Zealand and Australia, and will be notified well in advance of the proposed 1 April 2013 introduction date once a final decision is made. This will allow them to make final preparations for the new requirements. Local assemblers will be provided with extra information to ensure they are aware of how to meet the requirements.
- 64. From the introduction date, businesses will be required to register computers and monitors on an existing database shared with Australia. In order to complete a product registration, businesses will need to certify that the product has been tested and labelled correctly, disclose its energy performance, and be capable of supplying a test report. EECA will provide support for those needing help with registrations (either over the phone or in person), as it already does for other regulated products. A factsheet outlining the requirements and how to comply will be prepared, and information will be available on the EECA website.

65. Compliance will be achieved primarily though raising awareness of the regulations, helping industry members understand their obligations and working cooperatively with businesses. Businesses that repeatedly fail to meet their obligations could incur penalties of up to \$10,000 for each instance of non-compliance under the Regulations. Fines would be pursued as a last resort, and publicised to create a disincentive for further non-compliance and to instil public confidence that the Regulations are effectively policed. Independent testing will be carried out by accredited laboratories on selected models to verify their performance claims. Selection will be based on factors such as past performance, high performance claims, market share, and complaints received.

Monitoring, evaluation and review

66. Sales data for computers and monitors will be collected annually and used to compare actual and forecast energy savings under MEPS. A report on the impacts of MEPS and energy labelling for computers and monitors will be prepared annually and shared with stakeholders. The relevant standards will be reviewed every three to five years. Independent testing will be used to determine the rate of compliance with MEPS and energy ratings. The rate of compliance with labelling requirements will be monitored under EECA's existing retailer compliance surveys (which cover all labelled products under the programme).