

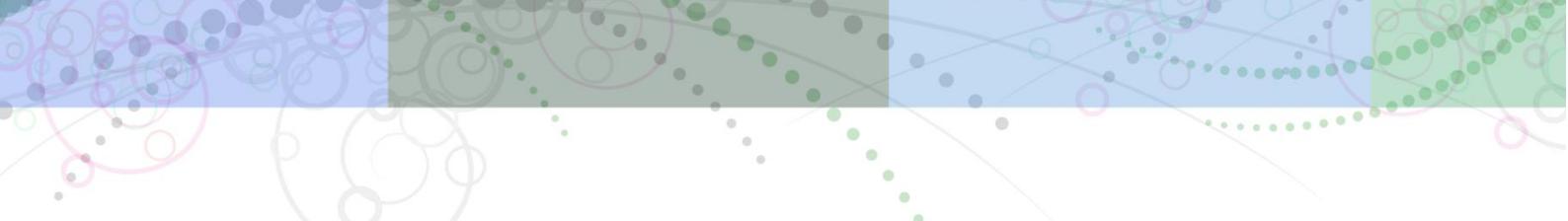
TRIPLE BOTTOM LINE ASSESSMENT FOR THE ACT GOVERNMENT

Framework and templates

July 2012



ACT
Government



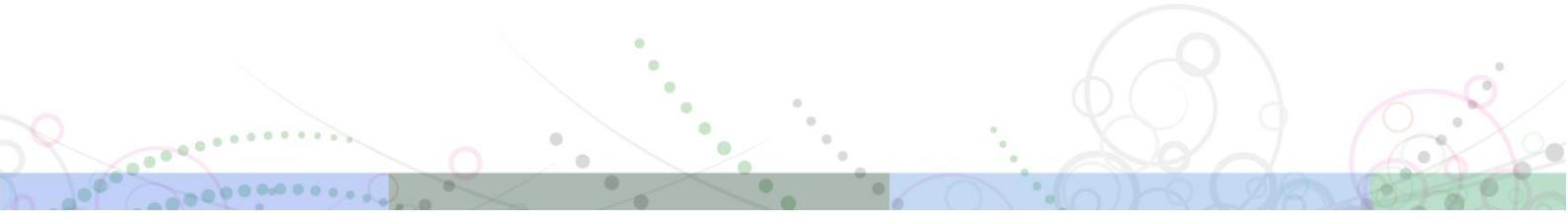
© Australian Capital Territory, Canberra, July 2012

This work is copyright. Apart from any use permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from the Territory Records Office, Shared Services, Treasury Directorate, ACT Government. GPO Box 158, Canberra City, ACT, 2601.

Produced by: Policy and Cabinet Division, Chief Minister and Cabinet Directorate

Contact: Director, Economic, Regional and Planning
Policy and Cabinet Division
Chief Minister and Cabinet Directorate
ACT Government
GPO Box 158
Canberra City ACT 2601
phone: 13 22 81

This publication has been prepared by officers of the Chief Minister and Cabinet Directorate, ACT Government. It is believed that the information is correct and reliable, but neither the authors nor the Directorate give warranty in relation hereto and no liability is accepted by the authors or the Directorate, or any other person who assisted in the preparation of the publication, for errors and omissions, loss or damage suffered as a result of any person acting in reliance thereon.



Contents

Triple Bottom Line (TBL) Assessment Framework for the ACT Government	1
Purpose.....	1
Introduction.....	1
How should the framework be used?	2
Application of the TBL Assessment Framework.....	4
Attachment A: TBL Assessment.....	9
Step 1:Problem identification and policy goal	10
Step 2:Preliminary assessment	11
Step 3:Detailed analysis	12
Attachment B: Guide to the analysis of economic, social and environmental impacts.....	21
The social assessment	21
The economic assessment.....	22
The environmental assessment	23
Attachment C1: Gender impact analysis.....	27
Purpose.....	27
Introduction.....	27
Gender equity.....	27
Gender equality.....	27
Gender analysis	28
Gender impact assessment.....	28
Attachment C2: Poverty impact assessment	32
Attachment D: Climate change impact assessment.....	35
Introduction.....	35
When is a climate change impact assessment required?	35
Analysis and information required in an assessment	37
Pitching the analysis at the right level.....	38
Different types of proposals.....	38
Attachment D1: ACT triple bottom line — climate change assessment	39
Attachment D2: Climate change mitigation assessment: summary of current sources and targets of ACT greenhouse gas emissions	41
Attachment D3: Climate change scenarios, impacts and adaptation assessment.....	43
Bushfire	43

Extreme heat	43
Flooding and storms.....	43
Water supply, quality and demand	43
Infrastructure	43
Natural systems.....	44
Most vulnerable communities	44

List of tables and figures

Figure 1: Climate Change Impact Assessment	4
Figure 2: TBL Process Diagram	5
Figure 3: Policy analysis framework for considering the public value of policy options	6
Figure 4: Climate Change Impact Assessment	36
Figure 5: Factors in a TBL assessment	37
Figure 6: ACT emissions disaggregated by sector	41
Table 1: ACT emissions targets by sector	42

Triple Bottom Line (TBL) Assessment Framework for the ACT Government

Purpose

This document sets out the ACT Government's approach to applying a Triple Bottom Line (TBL) Assessment Framework to policy development and decision-making.

TBL assessments are a standing requirement in the preparation of policy proposals (new policy or policy changes) for Government consideration (see section 'Application of the TBL Assessment Framework').

Introduction

This initial section provides a contextual understanding of the development of the TBL Assessment Framework as well as guidance on how best to apply it. The following sections provide detailed guidance on conducting a TBL assessment and include a series of templates to help officers best apply the framework.

Background

A well designed TBL assessment process can effectively support Government policy deliberations by bringing a broader range of perspectives and richer evidence to the attention of decision makers. The primary objective of adopting the TBL Assessment Framework is to assist in developing sound policy aimed at reducing any negative consequences of action, maximising positive impacts and fostering collaboration by drawing on expertise from across Government.

In December 2009, the ACT Government reaffirmed its commitment to achieving sustainability across the range of its policies and operations by releasing an updated version of *People, Place, Prosperity*.¹ It includes the guiding principle of 'integrating environmental, social and economic goals in policies and activities'.

People, Place, Prosperity also specifically commits the ACT Government to embedding TBL assessment into its day-to-day decision-making processes. Consistent with the commitments made in both the ACT's sustainability policy and elsewhere, a goal of the assessment framework is to embed sustainability considerations within the decision-making process.

A discussion paper was released for public comment in 2001, which was used as the basis of a formal pilot of TBL assessment in early 2012. In July 2012, the Government decided to further integrate TBL assessment into policy development and government decision-making processes. This embeds and expands on the high level economic, social and environmental impacts already considered in Government decision-making.

¹ ACT Government 2009, *People, Places, Prosperity: The ACT's Sustainability Policy*, Canberra, http://www.cmd.act.gov.au/_data/assets/pdf_file/0003/119730/people_place_prosperity.pdf.

The ACT Government has also committed to TBL agency reporting.² In 2009, the Government released for public comment a pilot TBL report for the Chief Minister's Department. TBL reporting was implemented in the 2009-10 ACT Government agency annual reports.

What is a Triple Bottom Line Assessment Framework?

The TBL Assessment Framework is a logical framework for identifying and integrating **social**, **environmental** and **economic** factors into the policy development cycle and the decision-making process by ensuring that decisions are informed by principles of sustainability. The framework incorporates elements of good policy development principles including identification of the problem to be addressed, the identified desired outcomes, impact assessment and analysis of risks associated with implementation of the policy proposal. Its emphasis is on the importance of integrating implementation issues into policy design to ensure that delivery of desired outcomes is a critical element of effective policy implementation.

How should the framework be used?

The TBL Assessment Framework has been designed to be scalable. This ensures that it is equally applicable to both relatively simple proposals as well as complex policy proposals with significant impacts and complex interactions. This approach also allows simple TBL assessments to be completed quickly and with little effort and cost. The TBL Assessment Framework will assist in impact analysis of complex policy proposals and may ultimately reduce the time taken to conduct a rigorous analysis for a Cabinet Submission.

The policy development cycle

The TBL assessment should be initiated early in the policy development cycle to enable issues and their potential negative impacts to be identified and creative solutions to be developed. This improves the positive balance of the eventual proposal, which could include strategies to offset potential negatives and so lead to better propositions being submitted for consideration. Internal processes of reconciling differences could be facilitated by applying the framework and finding accommodation for opposing impacts. Later in the policy development process, TBL assessments can be used to assist in clarifying issues in the monitoring and evaluation of performance.

A TBL assessment is a framework to identify positive and negative impacts, but it will not provide a clear answer in cases where there are competing impacts. This requires a decision-making process to weigh the costs and benefits of competing impacts to determine the merits of a proposal. In other words, a TBL assessment is not a rational decision-making tool; it is a methodology for creating a strong evidence base to inform better decision-making.

Inclusion of TBL assessments in Cabinet Submissions

The TBL summary should also be attached to the relevant Cabinet Submission. Any key issues should be referenced in the body of the submission.

² See <http://www.cmd.act.gov.au/policystrategic/sustainability> for further information.

Gender and poverty issues

The TBL Assessment Framework integrates gender and poverty impacts into the primary assessment to achieve a broader and more dynamic approach to the assessment of impacts. This also allows for a wider range of issues (such as child impacts, indigenous and aged persons, etc.) to be considered. This approach facilitates wider consideration of social impacts across policy proposals than the stand-alone approach that specifically targets those proposals with clear gender or poverty impacts.

In cases where the purpose of the policy is to address poverty or gender issues, these may be subject to more detailed gender or poverty assessments, which are provided at attachment C.

TBL assessments and Regulatory Impact Statements

The TBL Assessment Framework can perform a useful complementary role to the Regulatory Impact Statement (RIS) requirements by providing a broader initial scan of impacts. The TBL Assessment Framework can also achieve an objective of a RIS — to improve policy development by providing a framework for policy development that can be used more generally. The TBL Assessment Framework will not replace the requirement for RISs.

Climate change impact assessment

Assessment of climate change impacts will need to be conducted for Government Bills or for major policy proposals. Like the TBL Assessment Framework, the Climate Change Impact Assessment Framework is intended to be scalable to cater for Bills or major proposals from simple through to ‘with significant’ climate change impacts. The following approaches should be adopted to cater for differences across Government Bills and major policy proposals.

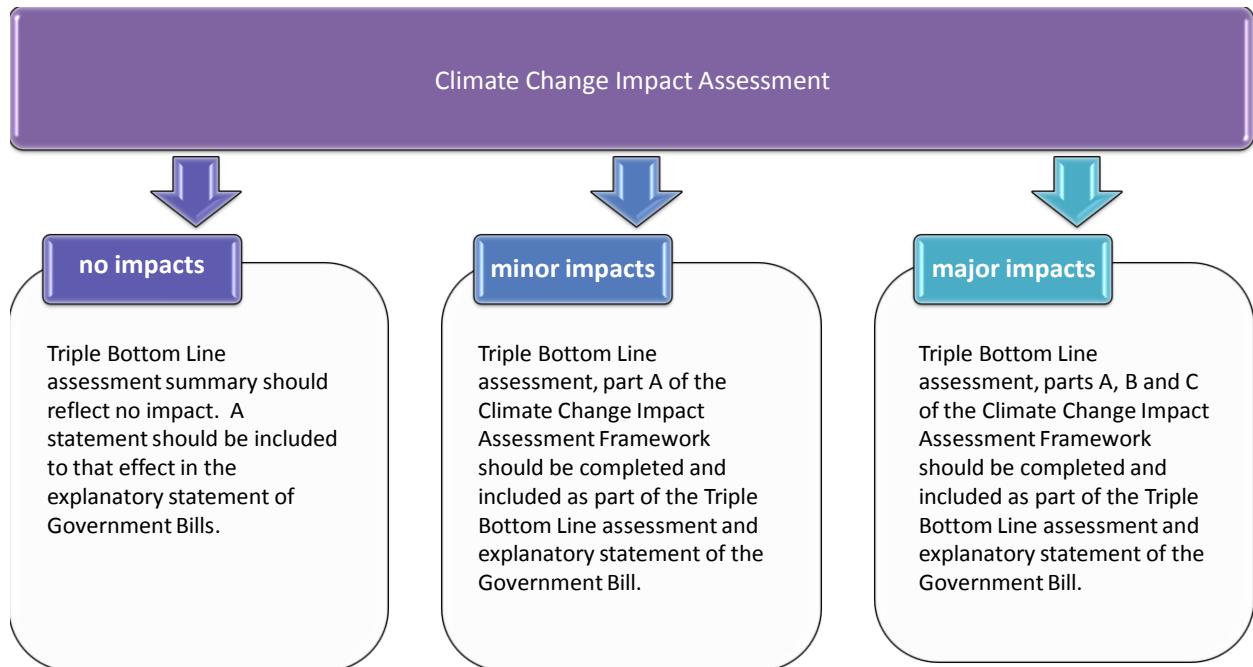
- Where there is no anticipated climate change impacts of a Government Bill or major policy proposal (based on the TBL assessment), the TBL assessment should reflect, and, a statement should be included in the explanatory statement of Government Bills that climate change impacts have been considered and no impacts have been identified.
- Where only minor climate change impacts are identified in the TBL assessment, part A of the Climate Change Impact Assessment Framework should be completed and included as part of the TBL assessment and explanatory statement of the Government Bill.
- Where major climate change impacts are identified in the TBL assessment, parts A, B and C of the Climate Change Impact Assessment Framework should be completed and included as part of the TBL assessment and explanatory statement of the Government Bill.

The precise thresholds for minor and major climate change impacts will need to be assessed on a case-by-case basis, recognising that the impacts will vary significantly depending on the nature of the major policy proposal or Government Bill.

In all other cases the broader TBL Assessment Framework will continue to apply to all proposals to describe potential aggregate impacts. Where significant climate change impacts are identified (mitigation and/or adaptation) that would not otherwise be picked up by the above criteria, an optional assessment can be conducted in support of the proposal.

The Climate Change Impact Assessment Framework is provided at attachment D.

Figure 1: **Climate Change Impact Assessment**



The assessment of impacts should be done during step 2 of the TBL assessment process (refer below to steps of the TBL process). This initial assessment of impact will determine the extent of further analysis of climate change impacts, as per the approach set out above.

The precise thresholds for minor and major climate change impacts will need to be assessed on a case-by-case basis, recognising that the impacts will vary significantly depending on the nature of the major policy proposal or Government Bill.

Application of the TBL Assessment Framework

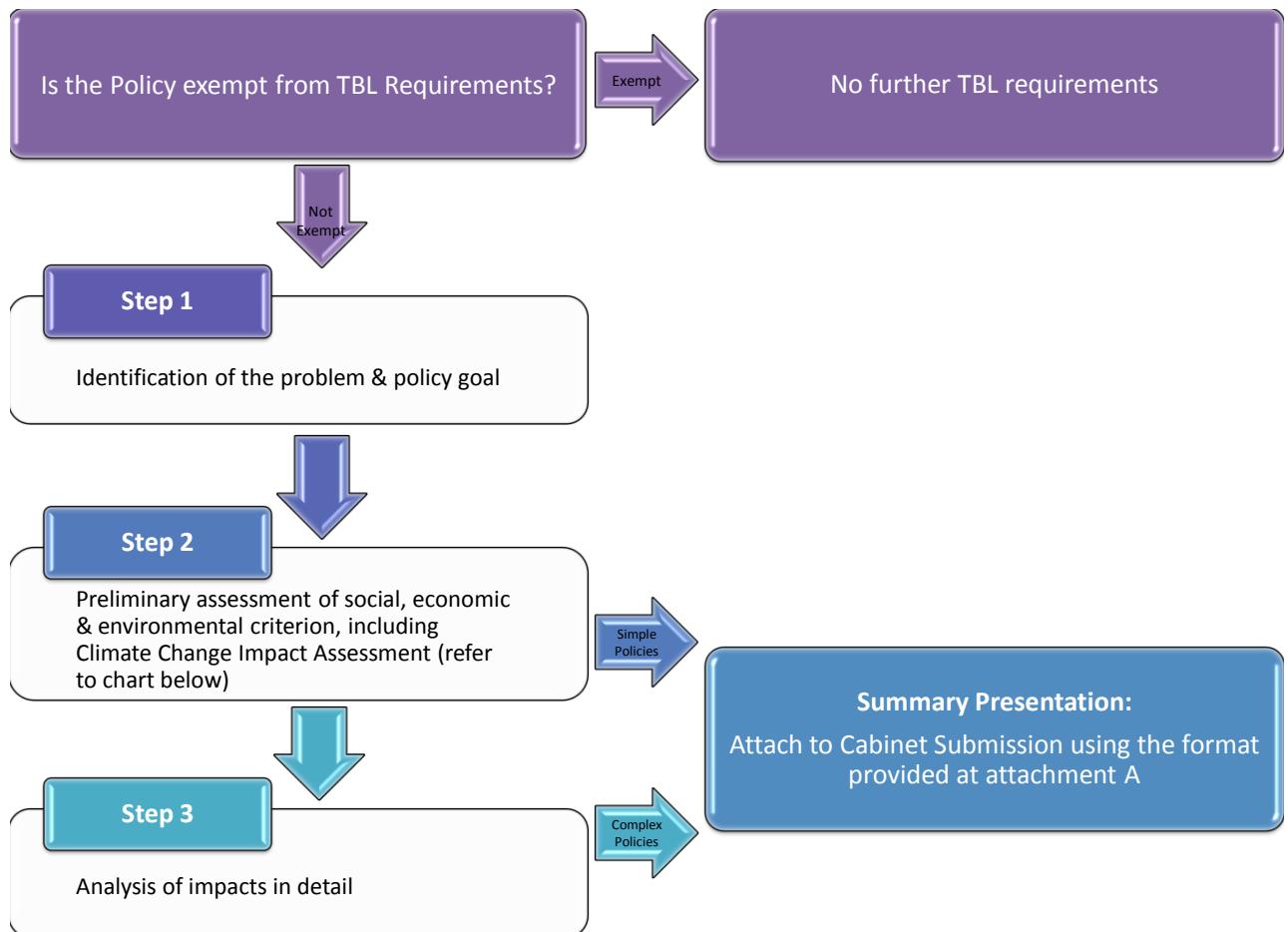
Which policy proposals require a TBL assessment?

TBL assessments are a standing requirement in the preparation of all proposals for a new policy or policy change for Government consideration. Exemptions are limited to technical submissions as set out in the Cabinet Handbook, including appointments, technical legislative instruments and Assembly business papers where a TBL assessment will not add value.

A three-step approach

Completing a TBL Assessment is a three-step approach, as set out in the process diagram below. Note that this does not include the requirements for Climate Change Impact assessments, which are addressed separately in the TBL Handbook.

Figure 2: TBL Process Diagram



Three steps are followed under the TBL Assessment Framework.

1. **Identification of the problem and the policy goal.**
2. **Preliminary assessment** (multi-dimensional scan) of the matrix of social, economic and environmental criterion. Where potential impacts are identified, these are documented and analysed in step 3.
3. **Analysis of significant impacts in detail** (for each criterion identified under step 2).

The templates for conducting a TBL assessment are provided at attachment A.

To simplify the requirements for presentation of TBL assessments to Cabinet a summary presentation would be attached to Submissions, as illustrated in attachment A. The extent of analysis performed by Directorates would depend on the internal needs of the Directorate in the development of the proposal. This approach also allows simple TBL assessments to be completed quickly and with little effort and cost. For example, where there are negligible social, economic or environmental impacts a preliminary scan of impacts would be completed, without a requirement for detailed analysis. For complex Submissions the most time consuming aspect will be completing the detailed analysis – to understand and explain the identified impacts.

Step 1: Problem identification and the policy goal

The first issue to consider at the outset is the reasons for the policy being developed, which will ultimately form the basis on which the policy will be assessed. These would include the following.

- What is the problem to be addressed?
- What is the policy goal?
- Is government intervention necessary?
- What options have been considered? (See figure 1.)
- Does the policy align with the ACT Government's strategic priorities?
- Does domestic and international evidence support intervention?
- Is the policy proposal technically feasible?

Identification of the problem to be addressed. This should be the starting point for any policy development as it is the starting premise for government intervention. It should become a fixed point of reference during the policy development process to ensure that the policy has clear objectives and is responding to a clearly understood need.

Identification of the overarching intended policy goal. A desirable policy goal should be the basis of evaluating impacts. For example, under 'income level and distribution', what is a positive outcome? Do both aspects have to increase? Or is increasing the income of the wealthiest a desirable outcome even if the distribution is less equal?

Figure 3: Policy analysis framework for considering the public value of policy options

Policy value	Current policy/no action	Option 1	Option 2
Equity			
Effectiveness			
Efficiency			
Flexibility			
Implementable			
Legitimacy			
Sustainability — fiscal			
Sustainability — environmental			
Sustainability — social			
Overall rating			

Note: Value could be ranked as 'high', 'medium', 'low' or 'n/a'.

Selection of preferred policy option(s)

At this point consideration can be given the quality of the policy intervention in contrast with other

potential interventions. Figure 1 provides a framework that could be used to assess the policy potential ('pros and cons') of alternative approaches. The framework can be used to select the preferred option as the basis of the TBL assessment in steps 2 and 3. The selection of the preferred policy option could be based on a rating of the 'policy value' of the identified options.

In cases of complex and high value policy proposals, a more rigorous approach could be adopted by conducting multiple TBL assessments across the identified policy options. This will provide a more detailed assessment of policy impacts as the basis of selecting a preferred approach. This approach is optional and should be judged on the materiality of the policy proposal.

Step 2: Preliminary assessment (multi-dimensional scan)

This involves a preliminary assessment (multi-dimensional scan) of the proposal against a matrix of 33 social, economic and environmental impact criteria. This is a rapid *prima facie* assessment as to whether the proposal is likely to have significant impacts against any of the criteria.

Possible impacts (positive, negative, mixed or not applicable (n/a)) of the policy proposal should be identified for each of the TBL assessment criterion. Key impacts can be highlighted in **bold**. Where impacts are identified, they should be analysed in step 3.

Step 3: Analysis of identified impacts and summary of conclusions

For each criterion where a significant impact is identified in step 2, additional analysis is required. Guidance for more detailed third step assessments is provided for social, economic and environmental criteria in attachment B.

Summary and assessment of technical feasibility

Is the policy proposal technically feasible? What risks to successful implementation have been identified and how will they be mitigated? What information needs to be gathered to measure success/failure?

This analysis will necessarily evolve during the policy development process and will have a direct bearing on the probability of different impacts identified in step 3.

Issues to consider in completing the analysis

Best fit: Some potential impacts may not have an obvious single ‘home’ in the template (for example, the cost of participation in community activities could fall either within ‘participation in community activities’ or ‘consumption’ or ‘cost of living’). Impacts should be located in the impact(s) of best fit. Cross-reference where necessary.

Distribution of impacts: In many cases there will not be an equal distribution of impacts across the economic, environmental and social areas. However, it is rare that a policy proposal will not have some impacts across all three areas.

Contradictory impacts: There may be situations where there are both positive and negative impacts for a particular area of focus. These should be separately identified and explained. An ‘on balance’ impact could be provided, with a summary of the impacts if applicable

Unquantifiable impacts: Some impacts may be unquantifiable, even if it is possible to determine their direction (positive/negative). These should be explained to provide an indication of possible impacts and likelihood.

Recognition of longer term impacts: Some impacts have a long lifespan or may only be realised well into the future so that it is difficult to quantify or assess the real impact. These should not be ignored. They should be identified and provide an indication of possible impacts and likelihood.

Changing impacts over time: Some impacts may vary over time where, for example, up-front costs in the short term would be offset by longer term benefits accruing, or some sections of society benefitting at the expense of others. *These changing impacts should be explained and an indication of their possible impacts and likelihood of occurrence should be identified.*

Biased assessments: Assessment should be as objective and balanced as possible with a focus on improvements in policy.

Attachment A: TBL Assessment

Illustrative TBL Presentation for Cabinet Submissions

Directorate: [Insert Directorate]

Title of the Submission: [Insert Title]

Summary of Impacts	
•	
<i>Key to impacts: Red – negative, Amber neutral and Green Positive.</i>	
Social	
Justice and rights	•
Economic	
ACT Government Budget	•
Productivity	•
Investment	•
Competition	•
Environmental	
Energy	•

Directorate:

Title of the submission:

Cabinet reference: [where applicable]

Contact officer:

Contact number:

Step 1: Problem identification and policy goal

Policy questions	Response/explanation
What is the problem to be addressed?	
What is the policy goal?	
Is government intervention necessary and can we be sure it will not make things worse in the long term?	
What options have been considered?	
Does the preferred approach align with the ACT Government's strategic priorities?	
Does the domestic and international evidence support intervention?	
Is the policy proposal technically feasible?	

Step 2: Preliminary assessment

In the matrix below, indicate all expected impacts (positive, negative, or not applicable (n/a)) of the policy proposal against each of the TBL assessment criterion. Significant impacts should be highlighted in **bold**.

Social	Economic	Environmental
Community and individual health	ACT Government Budget	Biodiversity
Access to services	Productivity and Innovation	Landscape changes
Housing and affordable housing	Income levels and distribution	Heritage
Access to social networks and community activities	Employment	Natural resources
Human rights	Small Business Impact	Environmental quality
Gender	Skills and Education	Greenhouse gas emissions
Indigenous and multicultural	Investment and Economic Growth	Water
Impacts on different age groups	Consumption	Air
Disability	Competition	Microclimate
Disadvantaged and vulnerable	Cost of living	Visual quality
Justice and crime	Procurement	Waste

Step 3: Detailed analysis

- Please address all the criteria that you identified in step 2 as being affected or impacted by the proposal in the above matrix. Delete the sections that are not relevant.
- The analysis should focus on the more significant or major impacts; there is discretion about the extent to which minor or remote impacts are addressed.
- The questions below should be used to guide the detailed analysis. The questions are not exhaustive. (Note: the questions do not need to be retained in the TBL analysis for each submission.)
- **Note:** Once you have completed the assessment, please delete the guidance information.

Social impacts

Community and individual health

Will the proposal lead to a change in the community's or individual's health? Identify potential impacts on human health and ACT community health.

Access to services

Will the proposal lead to a change in the community's or individual's access to services? This may include: health and wellbeing services (including prevention and early interventions); education and training; adequate transport options (both public and private); information and communication technology facilities; and access to community space and facilities. Provide details of the potential impact on access to services and how the particular services will be impacted.

Housing and affordable housing

Please provide details of the potential impact on affordable and adequate housing in the ACT. This should include any impact on public and private housing, rental and purchase markets, and homelessness support infrastructure (for example, emergency accommodation and services).

This should also include an assessment of any impact on land release in terms of timing, costs and statutory processes, for example environmental clearances or planning.

Access to social networks and community activities (community's sense of wellbeing)

Will the proposal impact the extent to which people: have access to social networks; feel connected and included; and have opportunities to participate in the community? Provide details of the potential impact on social inclusion, connectedness and participation.

Human rights

Will the proposal impact human rights? This should have particular regard to the *ACT Human Rights Act 2004*.

Gender impacts

Gender is one of the most fundamental organising features in society. Gender impact analysis provides a basis for the robust examination of the different impacts of a proposal on women, men, girls, boys, transgender and intersex people with a view to ensuring that any indirect or unintentional discriminatory effects are eliminated. The use of sex disaggregated quantitative and qualitative data, where possible, will avoid conclusions being based on incorrect assumptions and stereotypes.

- To what extent will the policy affect women and men, girls, boys, transgender and intersex people, directly or indirectly?
- Are the impacts the same for everyone or do they need to be different?
- Will the policy impact on particular groups of males or females based on their ability, sexual orientation, age or particular ethnic backgrounds?
- Describe these groups, the impacts on them and what strategies will be employed to give those groups opportunities to be consulted on the potential impact?
- Outline what data have been used in the gender analysis and what strategies will be put in place to consider other data in its ongoing assessment.
- Were all key stakeholders considered in the consultation process? Outline the process, including the strategies that were employed to give key stakeholders opportunities to provide input.

NOTE: Differential gender implications should also be considered in the review of all impact criteria, along with impacts on groups including such as poverty, children, indigenous, aged persons, etc.

Indigenous and multicultural

How will the proposal impact on Aboriginal and Torres Strait Islanders? What impact will the proposal have on other cultural or ethnic background?

Impacts on different age groups

To what extent will the policy affect different age groups, directly or indirectly? Are there potential advantages to considering impacts on particular age groups to reinforce the positive impacts or reduce negative impacts?

Disability

Will the proposal impact on people living with a disability?

Disadvantaged and vulnerable

Detail any disadvantaged and vulnerable groups that may be particularly affected by the proposal. This should include consideration of poverty impacts (if a detailed assessment is required, complete the framework at attachment C2).

- Which population group is the policy aimed at (the ‘target group’) and how will the proposal affect the disadvantaged and vulnerable groups in terms of their income, the ‘poverty gap’ and their capacity to participate socially and economically?
- What type of impact (in terms of income level) will the policy have for these vulnerable groups?

Justice and crime

How will the proposal impact on the justice system, policing, crime and/or crime prevention?

Economic impacts

ACT Government Budget
What recurrent costs are associated with the proposal? Are these costs to a specific directorate, or whole-of-government? What is the capital associated with this proposal? What are the associated operating costs, including accommodation, maintenance, leasing costs, staffing (including on-costs), consultants and contractors, consumables, etc.? What are the transition costs? Are there any savings to the ACT Government Budget associated with this proposal? What potential is there for savings or the use of existing resources? What reviews have been done in terms of better application of shared services or similar?

Productivity and Innovation
Will the proposal impact on productivity in the ACT? What factors will drive the change in productivity? What industry sectors will be affected? Will labour force productivity be affected? Does the proposal encourage or provide opportunities for business to be innovative and creative in the adaptation or development of ideas either individually, collaboratively, or in partnership with Government?

Employment
Will the proposal have an impact on employment levels in either the public or private sector? Will the proposal impact the ACT workforce composition? For example, will the age, gender and ethnicity of the workforce profile be affected? Will the proposal affect income levels and distribution in the ACT? Will income disparity be affected? Will the rate of pay between different groups be impacted by the proposal? (For example, will income be affected by the social or economic status of individuals?)

Small Business Impact
Will the proposal have an impact on small business, for example in terms of the regulatory or taxation environment? Does the proposal impact on opportunities for local businesses?

Skills and Education
Will the proposal lead to a change in the skills of the ACT workforce? Discuss the proposed impact on access to education and training. Discuss the proposed impacts on qualifications of the workforce.

Investment and Economic Growth

Will the proposal lead to changes in levels of public or private investment in the ACT economy, or the level of economic activity in the Territory? What will drive the change? And over what period? What sectors will be influenced?

Consumption

Will the proposal affect the level or pattern of household consumption of goods and services? Which households will be affected?

Competition

Will the proposal affect the competitiveness of the ACT economy? Will it impact on ACT or intergovernmental competition reforms? Is the proposal competitively neutral?

Cost of living

Will the proposal influence the cost of living in the ACT? What goods and services will be affected? Which households will be affected?

Procurement

Will the proposal have adverse impacts on procurement practices, efficiency, effectiveness or costs?

Does the proposal impact on the support for SMEs in Canberra and the region through Government purchasing decisions?

Environmental impacts

Biodiversity
Will the proposal impact on the ecology of the region? Will the proposal impact on populations of species, directly or indirectly? Is there potential for the proposal to endanger, or further endanger, any species of flora or fauna? Discuss the extent to which ecological processes (for example, migration) will be impacted by the proposal.
Landscape changes
Will the proposal lead to a material change in the landscape? Discuss the extent to which this proposal will alter the physical landscape — including natural land forms and vegetation — or the human-made elements including buildings, etc. Are these landscape changes consistent with strategic planning and legislative requirements?
Heritage
Will the proposal affect any premises or land (or the surrounds of any premises or land) that has heritage significance?
Natural resources
Will the proposal lead to a material change in the quantity or quality of natural resources in the ACT (or surrounding region)? Please note if these resources have been accounted for in the economic analysis — do not reassess here. See water analysis for specific water related assessment. Identify soil, soil creating processes and karst systems quality relative to standards and any potential impacts. Discuss the potential impact on access to minerals or other extractive resources. Will the proposal lead to material changes in the non-greenhouse components of the ACT's ecological footprint? For example, will the use of non-renewable resources be impacted? This analysis should include an assessment of the use of land, natural gas, electricity, firewood and motor vehicle fuel.

Environmental quality

Will the proposal lead to a material change in the environmental quality locally, nationally or internationally (including noise levels)?

Discuss how the proposal is consistent with explicit national commitments agreed by the ACT, such as under the Murray Darling Basin agreement or international agreements entered into by the Australian Government.

Greenhouse gas emissions

Will the proposal lead to a material change (either increase or reduction) in ACT greenhouse gas emissions, (electricity, natural gas, transport fuels and other emissions as calculated in the ACT GHG Inventory) and contribute to achieving the ACT's greenhouse gas reduction targets? Is this proposal consistent with ACT Government climate change policy and legislation?

Will an Environmental Impact Statement (EIS) be required? Does the proposal include a capital project of a value in excess of \$15 million? If so, a detailed assessment of climate change impacts is required — refer to attachment D.

Water

Will the proposal affect the efficient use of water, water pollution, water sensitive urban design or exposure to flood risk? Provide details of the potential impact on water quantity or quality, water consumption, wastewater generation and the aquatic ecology.

Air

Will the proposal lead to a material change in air pollutant levels and/or the population affected by air pollution? Provide details of the potential impact on air quality relative to standards and any potential impacts on human health and ACT government targets.

Microclimate

Will the proposal affect the microclimate? Discuss how the local or adjacent atmospheric zone will be impacted by the proposal. For example, will a tall building increase the shade in a local atmospheric zone? If so, what will the impact of this increased shade be?

Visual quality

Will the proposal change the aesthetics of an area? Provide details of the extent to which the proposal will alter the visual quality of the existing landscape.

Waste

Will the proposal affect the ACT's waste management systems and waste policies? For example, identify the potential for this proposal to either increase or decrease the amount of waste to landfill.

TBL assessment summary/results**TBL assessment — key findings and conclusions**

What were the key findings of the TBL assessment? What are the key tradeoffs identified (between social, environmental and economic)? On balance, does this assessment support the proposal?

Is the policy proposal technically feasible? What risks to successful implementation have been identified and how will they be mitigated (refer below)? What information needs to be gathered to measure success/failure?

If the policy is implemented, how can its impacts be measured or monitored? (For example, what data could be collected, what questions could be included in funding agreement monitoring and review, what issues should be considered in evaluation?)

Implementation risk	Risk level	Explanation
Does the proposal have clear intervention logic and identify weak links in the chain of causation?		
Have implementation risks/barriers been clearly identified?		
Is there a clear strategy for mitigating such risks?		
What are the consequences of action?		
Is the cost of the mitigation strategy proportionate?		
Has an appropriate monitoring system been identified for evaluating change?		
Have robust key performance indicators been identified for evaluating change?		
Have the costs for performance measurement been properly identified?		

Risks should be ranked as 'high', 'medium', 'low' or 'nil'³.

Risk management strategy for significant implementation risks
Set out a strategy to mitigate or manage high risks (as assessed by likelihood and consequence).

³ Also refer to the existing risk management framework used by the ACT Government at <http://www.treasury.act.gov.au/insurancerisk/>.

Attachment B: Guide to the analysis of economic, social and environmental impacts

The social assessment

There is potentially a significant overlap between the social impacts of a project or policy, and the environmental and economic impacts. Consequently, defining a set of well-targeted and discrete indicators is difficult.

The literature includes a range of different approaches to social impact assessment. Some of the international models emphasise factors most relevant to developing countries, such as the development of democratic institutions. The social component of a TBL assessment, therefore, is best moulded to meet particular circumstances; in this case, the assessment of the social impacts of ACT Government proposals.

This framework proposes the following structure for categories of social impact.

Demographic impacts

The assessment should consider whether the proposal will have significant impacts on the size or composition of the ACT population. Note that demographic change of itself is not of primary policy concern, so much as the consequential social impacts that flow from those changes.

Impacts on access to services in the ACT

This assessment should consider access to:

- health and wellbeing services (including prevention and early intervention);
- education and training;
- adequate transport options (both public and private);
- information and communication technology facilities; and
- community space and facilities.

Impacts on affordable and adequate housing in the ACT

This assessment should consider access to housing, both public and private, for those buying and renting, and impacts on homelessness support infrastructure (for example, emergency accommodation) and services.

Impacts on the community's sense of wellbeing (for example, social networks and social involvement, and feeling safe and secure at home)

This assessment should consider:

- access to social networks, connectedness and opportunities to participate in the community;
- participation in community and cultural activities;

- feeling safe and secure at home and in the community;
- the level of risk faced by the community or government; and
- the complexity faced by ACT residents in managing their daily activities.

Impacts on community and individual human health

The assessment should consider the potential range of human health impacts.

Impacts on justice and rights

The assessment should consider the impacts on justice and rights, paying particular regard to the *ACT Human Rights Act 2004*.

Different impacts across different sectors of the community relative to gender, age, cultural background, household type and location, and across vulnerable groups

This analysis should consider whether there are any groups impacted by the proposal more than others. Specifically, the assessment should fulfil the Government's commitment to undertake gender impact analysis. Such analysis identifies whether particular groups of females or males are significantly affected by a proposal.

The analysis also needs to be extended to identify any other groupings that are particularly affected by a proposal, whether on the basis of income, cultural or ethnic background, age or any other categorisation.

The economic assessment

A comprehensive economic assessment would comprise two components: an assessment of the impact of an initiative on the ACT Government's financial position and an assessment of the initiative's impacts on the broader ACT economy.

Financial impacts on the ACT Government

Costs and benefits should be identified and analysed in two main groupings. These are:

- the agency
- whole-of-government.

Costs

Costs can generally be divided into capital, operating and transition costs such as:

- capital — upfront capital outlay including costs associated with construction, acquisition and or implementation;
- operating costs — including accommodation, maintenance, financing costs, leasing costs, staffing (including on-costs), consultants and contractors, and consumables; and

- transition costs — including relocation, disposal of old equipment, use of interim facilities, redundancy payments and/or retraining, negotiation and preparation of contracts, and new management information systems.

Labour on-costs (including leave loadings, superannuation, administrative and operational expenses, accommodation and corporate support) should be included for direct and indirect staff. If an agency-specific overhead factor is not available, reference should be made to current ACT Government Guidelines. Non-salary related on-costs, such as accommodation, should also be included for contractors as applicable.

Care should be taken not to double-count operational costs and accommodation costs.

Benefits

Benefits should be quantified and valued to the extent possible. Benefits normally include:

- realisable cost reductions compared with existing arrangements — care should be taken to ensure that these cost reductions are not already reflected in lower costs included in the analysis;
- increases in revenue due to dollars generated;
- increased productivity such as improvements in performance or quality as measured, for example, by decreased time to produce outputs;
- additional costs avoided; and,
- residual value of any assets no longer required — the residual value should be costed according to its highest value alternative use.

Broader economic impacts

There is no clear division between economic impacts and social impacts, given that changes in the ACT economy have direct social impacts.

The economic assessment should consider employment matters, including the capacity to find work, underemployment, casual and part-time work, and proportion of people living in jobless households. Workforce composition (including gender, age, etc.) and skills are also important considerations in this context.

The assessment should also consider the impact of the purchasing capacity of households for utilities such as food, electricity, water, etc.

The impacts of the proposal on investment, consumption and competition should also be considered.

The environmental assessment

The principles and concepts underpinning environmental assessment are familiar to most policy makers, as environmental impact and assessment procedures have become well established since their introduction in the early 1970s.

The environmental assessment in the TBL Assessment Framework should identify material changes to the physical environment, whether adverse or beneficial, wholly or partly resulting from the activities relating to the proposal in question.

Quantification of impacts is important, particularly where there may be environmental standards for particular indicators. Quantitative prediction of impacts can, however, be very difficult, due to the complexity of the natural systems involved and the absence of relevant or up to date data.

Ideally, it would be possible to place a dollar value on environmental impacts, and a range of economic methods have been developed for this purpose. There remain questions as to whether such methods can accurately determine dollar valuations for environmental values in the absence of an operating market. It is, therefore, proposed that the TBL assessment predict environmental impacts as accurately as possible in relation to the changes to indicators of the physical environment.

There are considerable potential overlaps between environmental impact assessments on the one hand, and social impact assessments and economic cost–benefit analyses on the other. This framework recognises that some impacts could be placed in one or more of the assessments.

This framework proposes the following structure for categories of environmental impact.

- Impacts that do not directly affect human economic or other interests, such as the broader natural environment systems (including biodiversity and natural features).
- Impacts on physical features, natural or human-made, that directly affect human economic or other interests.
- Environmental impacts on economic interests.
- Impacts on human psychological and physical health.
- Impacts on national or international environmental systems.
- Impacts on the ACT's greenhouse gas emissions.
- Impacts on other nationally and internationally important environmental systems, such as the Murray Darling Basin system.
- Impacts on ACT's resource use, including consumption (and recycling) of non-renewable resources.
- Other impacts.

Climate change impact assessment

An assessment of climate change impacts will need to be conducted for Government Bills or for policy proposals where an Environmental Impact Statement (EIS) is required or the value of a capital project is in excess of \$15 million.

Like the TBL Assessment Framework, the Climate Change Impact Assessment Framework is intended to be scalable to cater for Bills or proposals with climate change impacts from simple through to significant. The following approaches should be adopted to cater for differences across Government Bills and policy proposals

- Where there is no anticipated climate change impact of a Government Bill (based on the TBL assessment), a statement should be included in the explanatory statement of Government Bills that climate change impacts have been considered and no impacts have been identified.

- Where any minor climate change impact is identified in the TBL assessment, part A of the Climate Change Impact Assessment Framework should be completed and included as part of the explanatory statement of the Government Bill.
- Where major climate change impacts are identified in the TBL assessment, parts A, B and C of the Climate Change Impact Assessment Framework should be completed and included as part of the explanatory statement of the Government Bill.

Impacts on the ACT's broader natural environment, including biodiversity and natural features

The assessment should consider the range of biological impacts as they affect populations of species, ecosystems and broader landscapes. Impacts can be directly on entities such as a species (for example, clearing an area of habitat for a threatened plant), or on ecological processes such as migration (for example, draining of wetlands that provide habitat for migratory birds).

Non-biological natural features should also be considered — such as the impacts on soils, soil-creating processes and karst (limestone cave) systems.

Impacts on the physical elements, natural or human-made, that directly affect human economic or other interests

The proposal might impact, for example, on economic natural resources — such as the productivity of soils or access to mineral or other extractive resources. If identifying these impacts in this section, it will be important that they are not double-counted in the economic section.

It could also include impacts on traffic or transport systems in the ACT. It should assess the impacts on traffic volumes and congestion.

This assessment should include ambient noise, air quality and water quality.

It should also consider whether the proposal would increase natural hazards, such as soil vulnerability to landslips and the regulation of storm surges and downstream vulnerability to flooding.

Impacts on national or international environmental systems

This assessment should consider both the direct and indirect emissions caused by the proposal. For example, direct greenhouse gas emissions would include those due to increased petrol-driven motor vehicles. Indirect emissions would include the emissions generated by interstate power stations to provide electricity to meet increased ACT Government demand.

This assessment considers the ACT's role as a 'good national and international citizen'. Generally, assessment should be against explicit national commitments agreed to by the ACT, such as under Murray Darling Basin agreements, or international agreements entered into by the Australian Government.

Impacts on the ACT's resource use, including consumption (and recycling) of renewable and non-renewable resources

This question relates to non-greenhouse components of the ACT's 'ecological footprint.' This assessment should consider changes to ACT consumption of renewable resources, such as water.

The assessment should consider the impacts on ACT consumption of non-renewable resources, particularly where these might be scarce or damaging to produce. Examples include land, natural gas, electricity, firewood and motor vehicle fuel. The assessment should also consider the impacts of the proposal on the ACT's waste management systems.

Whole of life-cycle impacts

A life-cycle assessment of a particular product or service, such as the build, operation and maintenance of an extension to a bus network, assesses the consumption of natural resources in the manufacture, delivery, use and disposal of its components. This enables determination of the product's or service's contributions to an ecological footprint through recognition of the embedded 'costs' at the time of acquisition.

Where information is available, consideration should be given to assessing the whole of life-cycle impacts when deciding on alternative courses of action. Support can also be sought, including through <http://www.alcas.asn.au/resources/practitioners>.

There are established National and International standards to support assessment:

- AS/NZS ISO 14040 (1998) Environmental Management — Life-cycle Assessment — Principles and Framework, International Organization for Standardization, Geneva, Switzerland; and
- 559 ISO 14042 (2000) Environmental Management — Life-Cycle Assessment, Life-Cycle Impact Assessment, International Organization for Standardization, Geneva, Switzerland.

Other impacts

Other impacts that should be considered include:

- impacts on the microclimate of the site and adjacent areas; and,
- impacts on the visual quality of the existing landscape (note that this might impact economic values, such as land prices).

Attachment C1: Gender impact analysis

Purpose

This is an assessment that can be used to conduct a detailed gender impact assessment. It is optional, contingent on whether primary gender impacts are identified in the TBL analysis.

Introduction

Gender is one of the most fundamental organising features in society and affects our lives from the moment we are born. Gender impact assessment involves an assessment of policies and practices to see whether they will affect women, men, girls, boys, transgender and intersex people differently.

This process will allow the ACT Government to consider the impact its policies may have on women, men, girls and boys, and transgender and intersex people in the ACT, and whether or not different groups will be advantaged or disadvantaged by them. It does this by examining the relationships between the groups and identifying any gender inequities that may exist with a view to adapting these policies/practices to make sure that any discriminatory effects are eliminated.

The ACT Government is strongly committed to removing barriers to the full participation of women in society. The *ACT Women's Plan 2010–2015* articulates the Government's commitment to improving outcomes for women and girls across economic, social and environmental areas.

ACT and Commonwealth law prohibits sex discrimination:

- Discrimination Act 1991 (ACT)
- The Sex Discrimination Act 1984 (Commonwealth)
- Equal Opportunity for Women in the Workplace Act 1999 (Commonwealth)

Australia ratified the *United Nations Convention on the Elimination of all forms of Discrimination against Women* (CEDAW) in 1983. The Convention commits Australia to taking specific steps to eliminate discrimination against women and work towards equality for women in all areas of social, economic and political life.

Gender equity

Gender equity refers to fairness and justice in the distribution of benefits and responsibilities across gender lines.

Gender equality

This means that all women, men, girls, boys, transgender and intersex people enjoy the same equality and that their different aspirations and needs are equally valued.

Gender inequality is experienced mainly by women as the following statistics demonstrate. Issues that affect men and boys are also noted.

- Women remain under-represented in senior leadership and decision-making positions. In February 2012, the representation of women in the ASX200 boardrooms was only 13.8 per cent. Out of the ASX 200, 64 boards still have no women.
- The gender pay gap in the ACT is nearly 12 per cent. This means that, for every dollar earned by men, women earn 88 cents. The national gender pay gap at 17.6 per cent is a three decade high.
- The gender pay gap has serious financial implications for women, particularly in relation to their retirement saving, resulting in women being two and a half times more likely to be living in poverty in their old age than men (AMP NATSEM Wealth and Income Report, Issue 22).
- In the ACT, women comprise more than 80 per cent of the community sector workforce, 77 per cent of ACT Government teaching staff and 77 per cent of ACT Health staff.
- Men have higher death rates at all ages than women. Men are four times more likely than women to die through suicide and have higher levels of health damaging behaviours such as drink driving and extreme sports.
- Men are reluctant users of primary health care services, which can result in poorer health outcomes.
- Women outnumber men in the older age groups, especially at very old age. In the ACT by age 80 women outnumber men by 50 per cent.

Gender analysis

Gender analysis starts from the premise that no policy, program or service is gender neutral. The gender analysis process pays specific attention to the difference in gender roles, activities, needs and available opportunities for women, men, girls, boys, transgender and intersex people.

Because of economic and social differences between women, men, girls, boys, transgender and intersex people, policy consequences, intended and unintended, can vary along gender lines. It is only through consideration of gender that these differences become apparent so that solutions can be devised.

The goal of gender analysis is to provide quantitative and qualitative information and data to inform the differential gender impacts of a proposal/policy.

Gender impact assessment

Gender impact assessment (GIA) is one of the ways in which gender inequalities can be addressed.

One of the strengths of a GIA is that it focuses on indirect or unintentional discrimination. Indirect discrimination can be very subtle and based on given beliefs, assumptions and practices that go largely unchallenged and, as such, are considered ‘normal’.

The gender impact assessment process essentially involves answering two key questions.

- Is there a gender inequality or a potential gender inequality in this area?
- What can be done about it?

The following questions provide a guide to completing a gender impact assessment.

Which population group is the policy aimed at (the ‘target group’) and are there likely to be differential impacts on women, men, girls, boys, transgender and intersex people?

What is known about the type of impact the policy will have on women, men, girls and boys, and transgender and intersex people? To avoid gender bias: examine sex disaggregated quantitative and qualitative data; question basic assumptions; and develop an understanding of the intersection between social, economic and environmental impacts and how these relate to gender.

What type of impact will the policy have for women, men, girls, boys, transgender and intersex people, including those from vulnerable groups?

	No impact	Positive	Negative
Women and girls			
Men and boys			
Transgender and intersex people			
Those living under the poverty line			
Children and young people			
The elderly			
Aboriginal and Torres Strait Islanders			
People with a disability			
Long-term unemployed			
Single parents			
People with a mental illness or drug/alcohol issues			
Refugees, migrants, ethnic minorities, and those with low level English			
Other			

What impact will this proposal have on the capacity of people to participate socially and economically?			
	No impact	Positive	Negative
<p>In what way will this policy affect the Canberra population (with particular focus on differential gender impacts including the vulnerable groups listed above) in their ability to:</p> <ul style="list-style-type: none"> – access education and training pathways? – access employment opportunities? – have a social network? – be involved in the community (via activities, group membership, civic involvement)? – feel safe and secure? – access appropriate healthcare? – access adequate and affordable housing? – access adequate transport (both public and private)? – access information/communication technology facilities (that is, email, phone, computer and internet access)? – attend or participate in cultural activities (that is, sport, recreation and creative arts)? 			

If the proposal would have a negative gender impact, how would this occur and what changes could be made to the policy to alleviate this?
--

If the proposal would have a positive gender impact, how would this occur and could the positive effects be further enhanced?
--

If the proposal would have no gender impact, what options could be considered to produce a positive effect?
--

If the policy is implemented, how can its gender impact be measured or monitored? (For example, what data could be collected, what questions could be included in funding agreement monitoring and review, what issues should be considered in evaluation?)

Attachment C2: Poverty impact assessment

This is an assessment that can be used to conduct a detailed poverty impact assessment. It is optional, contingent on whether primary poverty impacts are identified in the TBL analysis.

The main purpose of a poverty impact assessment is to help policy-makers identify and focus on possible impacts arising from their policy proposal on the three indicators of poverty — income, depth of poverty and capacity to participate. It also prompts thinking about possible methods of alleviating these poverty impacts. The detailed questions to fulfil a poverty impact assessment are outlined below.

Which population group is the policy aimed at (the ‘target group’) and how will the proposal affect those groups in terms of their income, the ‘poverty gap’ and their capacity to participate socially and economically?

Will this proposal affect people outside the target group? Who are they and how will they be affected?

What type of impact (in terms of income level) will the policy have for these vulnerable groups?			
	No impact	Positive	Negative
Those living under the poverty line			
Women			
Children and young people			
The elderly			
Aboriginal and Torres Strait Islanders			
People with a disability			
Long-term unemployed			
Single parents			
People with a mental illness or drug/alcohol issues			
Migrants, ethnic minorities, and those with low level English			
Other			

It is important to assess not only changes to income levels, but also the expected impact on household expenditure and rises in prices for goods and services. This will give a basic indication of whether the policy will push more people below the poverty line and/or affect the depth of poverty for households already below the poverty line. The impact of ACT Government and Australian Government concessions on mitigating impacts on these groups should also be taken into account at this stage of the analysis.

What type of impact would the proposal have on the depth of poverty across the whole community (using the indicators listed below)?			
	No impact	Positive	Negative
Income distribution (Gini co-efficient)			
Long-term unemployment rate (greater than 12 months)			
Proportion of people living in jobless households			
Proportion of young people successfully completing secondary or vocational studies			
Proportion of adults with post-school qualifications			
Proportion of the population experiencing primary homelessness			

What impact will this proposal have on the capacity of people to participate socially and economically?			
	No impact	Positive	Negative
In what way will this policy affect the Canberra population (with particular focus on the vulnerable groups listed above) in their ability to: <ul style="list-style-type: none"> – have a social network? – be involved in the community (via activities, group membership, civic involvement)? – feel safe and secure? – access education and training pathways? – access employment opportunities? – access appropriate healthcare? – access adequate and affordable housing? – access adequate transport (both public and private)? – access information/communication technology facilities (that is, email, phone, computer and internet access)? – attend or participate in cultural activities (that is, sport, recreation and creative arts)? 			

If the proposal would have a negative effect on poverty (that is, increase numbers in poverty, increase the depth of poverty and/or decrease the capacity to participate), how would this occur and what changes to the policy could be made to alleviate this?

When considering the financial impact on individuals and any possible changes to the proposal, it is important to consider the current ACT concessions regime and whether current concessions could mitigate negative impacts of the policy proposal.

If the proposal has a positive effect on poverty (that is, reduces numbers in poverty, reduces the depth of poverty and/or increases the capacity to participate), how would this occur and could the positive effects be further enhanced?

If the proposal has no impact on poverty, what options could be considered to produce a positive effect?

If the policy is implemented, how can its impact on poverty be measured or monitored? (For example, what data could be collected, what questions could be included in funding agreement monitoring and review, what issues should be considered in evaluation?)

Attachment D: Climate change impact assessment

Introduction

The ACT Legislative Assembly passed the *Climate Change and Greenhouse Gas Reduction Act*⁴ in October 2010. The greenhouse gas emissions targets set by this Act require the Territory to reduce emissions to:

- 40 per cent less than 1990 levels by 2020;
- 80 per cent less than 1990 levels by 2050; and
- zero net emissions by 30 June 2060.

Meeting these legislated commitments will require an agreed program of abatement, adaptation and mitigation measures. The monitoring and assessment of ACT Government activity, including through the proposed climate change impact assessments, may help inform and refine the program. The proposed approach includes a form to guide the assessment (attachment D1). It also includes guidance to assist those preparing the assessment (attachment D2 for mitigation and attachment D3 on the approach to climate scenarios and related adaptation implications).

When is a climate change impact assessment required?

Assessment of climate change impacts will need to be conducted for Government Bills or for major policy proposals. Like the TBL Assessment Framework, the Climate Change Impact Assessment Framework is intended to be scalable to cater for Bills or major proposals from simple through to ‘with significant’ climate change impacts. The following approaches should be adopted to cater for differences across Government Bills and major policy proposals.

- Where there is no anticipated climate change impacts of a Government Bill or major policy proposal (based on the TBL assessment), the TBL assessment should reflect, and, a statement should be included in the explanatory statement of Government Bills that climate change impacts have been considered and no impacts have been identified.
- Where only minor climate change impacts are identified in the TBL assessment, part A of the Climate Change Impact Assessment Framework should be completed and included as part of the TBL assessment and explanatory statement of the Government Bill.
- Where major climate change impacts are identified in the TBL assessment, parts A, B and C of the Climate Change Impact Assessment Framework should be completed and included as part of the TBL assessment and explanatory statement of the Government Bill.

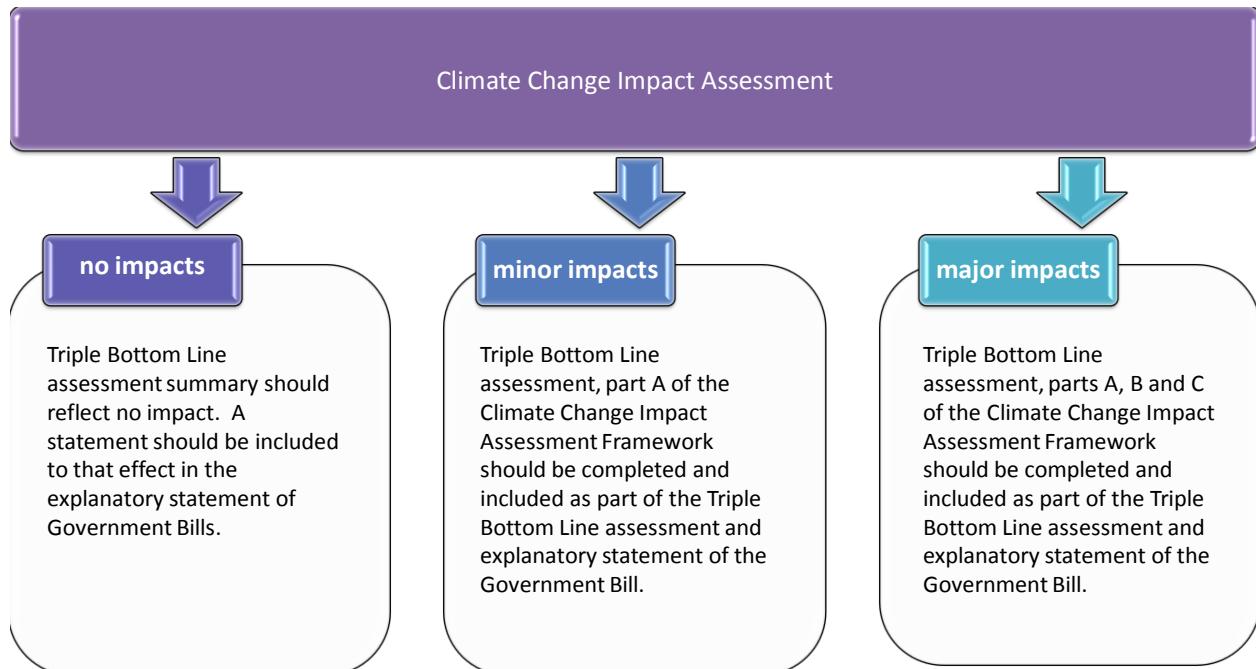
The precise thresholds for minor and major climate change impacts will need to be assessed on a case-by-case basis, recognising that the impacts will vary significantly depending on the nature of the major policy proposal or Government Bill.

In all other cases the broader TBL Assessment Framework will continue to apply to all proposals to describe potential aggregate impacts. Where significant climate change impacts are identified

⁴ See <http://www.legislation.act.gov.au/a/2010-41/default.asp>.

(mitigation and/or adaptation) that would not otherwise be picked up by the above criteria, an optional assessment can be conducted in support of the proposal.

Figure 4: Climate Change Impact Assessment



The assessment of impacts should be done during step 2 of the TBL assessment process. This initial assessment of impact will determine the extent of further analysis of climate change impacts, as per the approach set out above.

The precise thresholds for minor and major climate change impacts will need to be assessed on a case-by-case basis, recognising that the impacts will vary significantly depending on the nature of the major policy proposal or Government Bill.

Mitigation implications

A policy or proposal will need to be analysed to assess its impact on climate change mitigation objectives, especially through changes in greenhouse gas emissions (positive or negative), and whether the policy or proposal has consequent impacts on the ACT Government's legislated Greenhouse Gas (GHG) Reduction Targets. For example, it will be important to consider whether the proposal will lead to a material change (either increase or reduction) in the ACT greenhouse gas emissions (electricity, natural gas, transport fuels and other emissions as calculated in the ACT GHG Inventory) and how the proposal will contribute to achieving the associated ACT Government greenhouse gas reduction targets.

Impact and adaptation implications

It will be important to consider how the proposal takes account of possible climate change impacts, including managing the associated risks and opportunities for the ACT. The frame of analysis should include current or potential:

- impacts and vulnerabilities resulting from climate change;

- adaptive capacity/resilience, and
- adaptation responses.

For example, as a consequence of more extreme climatic events, stormwater capacity may need to be increased to manage the risk of climate change.

Analysis and information required in an assessment

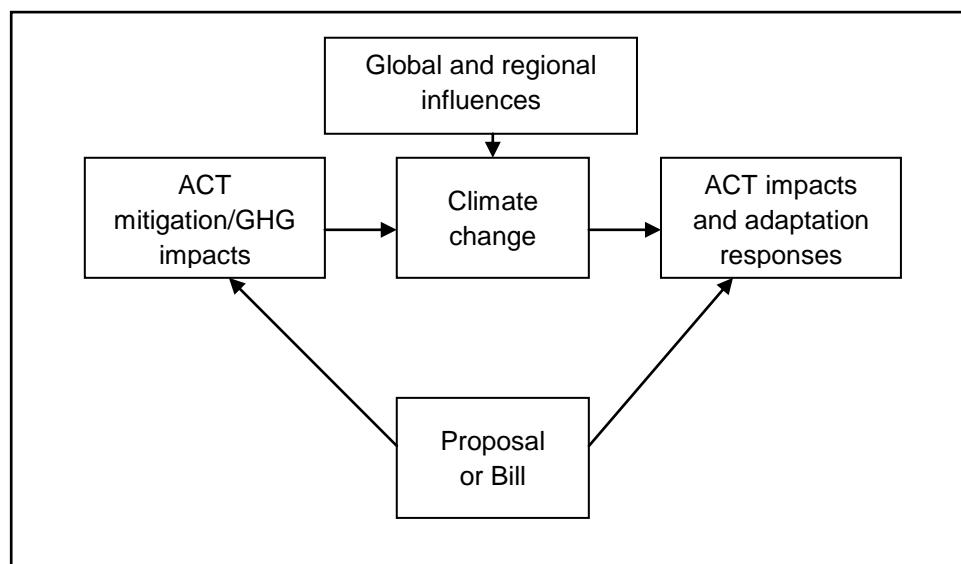
Consideration of general mitigation and adaptation impacts and consequences should be made as part of the TBL initial assessment (figure 2). If the impacts against either factor are significant, then analysts should use the core questions contained in attachment D1 as the basis for assessing impact. If during initial consideration there is some uncertainty about the significance of the impact, a preliminary assessment should be conducted against the approach set out in part A of attachment D1 and a decision made whether or not to proceed with the other parts accordingly.

Factor 1: Mitigation implications

Proponents should identify the major components of greenhouse gas emissions that may be impacted by the proposal (see attachment D2 for summary of current emissions by sector and ACT Government legislated targets). An estimate of the quantity of greenhouse gas emissions generated or abated (in tonnes CO₂-e) should be made, incorporating an associated cost–benefit analysis.

The impact could be through a variety of influences (for example, change in overall energy demand and/or energy efficiency, change in sources of energy (renewable versus non renewable), change in potential for carbon/CO₂ sequestration). Where a proposal is anticipated to increase emissions substantially, the assessment should include costed options for further mitigation and an estimate of the likely reductions arising from such measures.

Figure 5: Factors in a TBL assessment



Factor 2: Impact and adaptation implications

Proponents should identify the areas where there are interactions/interdependencies with climate

change impact and adaptation (attachment D3 to this document provides a summary of climate scenarios and major areas of impact and adaptation response). The assessment should be based on currently predicted future climate change trends as an indication of the likely or potential magnitude of change. However, proposals with significant implications and/or sensitivities (for example, water supply planning), should be assessed against a range of scenarios in a supplementary analysis.

Proposals should outline:

- the risks to the proposal's *own* intent and outcomes arising from the current or potential impacts of climate change and related mitigation/adaptation measures;
- the extent to which the proposal potentially causes change to the risks and outcomes of *other* climate change mitigation/adaptation related policies, strategies and plans; and
- the extent to which the proposal addresses these changed risks and vulnerabilities.

Pitching the analysis at the right level

The impacts of climate change can be complex and pervasive across social, economic and environmental dimensions. The process, therefore, needs to allow a practical balance — being specific enough to identify and understand the main impacts, while not requiring exhaustive and resource-consuming analysis of less important effects.

Further, in some cases, strategic 'bundling' of similar proposals together to measure their aggregate impact can highlight the major interdependencies between different parts of proposals, and the areas that provide for 'win-win' and trade-off situations, which are characteristic of climate change issues. For example, the overall climate implications of an infrastructure proposal might be better addressed through a collective assessment of related infrastructure projects. This approach should foster more strategic outcomes, as well as being administratively simpler. In some cases the appropriate 'proposal framing and scope' for the assessment might be established at a whole-of-government level to ensure a strategic and holistic approach is taken.

Different types of proposals

Only those major proposals that identify significant climate change impacts through the overview assessment contained in the TBL Assessment Framework will be required to perform the detailed assessment set out in attachment D1.

For some proposals, addressing climate change will already be a major component or even a primary objective of the submission (for example, submissions related to *Weathering the Change*, the *Spatial Plan*, energy policy, *Think Water Act Water*, water supply planning, emergency management strategies and plans). In these cases, it is likely that the submission or Bill will already address climate change issues and the assessment process described here should be seen as a confirmation or checklist that relevant issues have been addressed.

In other cases, the proposal will have a quite separate primary objective so that climate implications may be less obvious (for example, individual development or infrastructure proposals, changes to operational services, health and community initiatives). In these cases the assessment process described here is likely to be the main source of climate change impact information.

Attachment D1: ACT triple bottom line — climate change assessment

Title of the proposal:

PART A

Overall climate implications assessment

What is the overall assessment of climate change implications for the proposal?

- a) What is the overall assessment of climate change implications related to the proposal — both positive and negative?
- b) Is the nature of the implications that (may be more than one):
 - the proposal's intent, outcomes or risks are impacted by climate change implications;
 - other climate change policies, strategies, plans, programs or risks are impacted by the proposal; or
 - a modified version of the project would make an additional contribution to achieving other Government environmental policies, such as *Weathering the Change*?
- c) How has the proposal addressed the implications?
 - To what extent have the most significant negative implications been able to be addressed in the proposal and to what extent are there significant residual implications?
 - Are there additional or other options to further improve either positive or residual negative implications? (Also include possible interventions that could be mainstreamed into other relevant policies/strategies/plans.)
 - Have the implications and options been discussed with other relevant agencies or stakeholders? If so, has their feedback been taken into account?
 - Where there are significant residual negative implications, what is the essential trade-off involved and what is the basis for recommending that the proposal proceed notwithstanding the climate change implications?
- d) Does the proposal provide a basis for enhancing the ACT's underlying capability and capacity to respond to climate change through relevant knowledge development (for example, research, education and communication), monitoring and evaluation of outcomes and/or development of relevant government/community partnerships?

PART B**Mitigation assessment**

Are there implications for climate change mitigation? (See also attachment D2.)

- a) What aspects of the proposal might have greenhouse gas emission implications? For example, will the proposal depend on more or less fossil fuel usage or about the same?
- b) What is the estimated impact on the level of 'direct' greenhouse gas emissions in tonnes CO2-e as accounted for under the ACT GHG Inventory?
- c) What greenhouse gas emissions offsets have been proposed to reduce the impacts of the proposal? Have they been subject to cost–benefit analysis?

PART C**Impacts and adaptation assessment**

How does the proposal take account of expected climate change implications? Broadly, climate change in the ACT is expected to manifest as more extreme weather events more often, hotter drier summers and longer periods of drought, and shifts in rainfall patterns such as drier autumns and wetter springs.

Does the proposal have implications for the ability of the ACT to adapt to changing climate including managing the associated risks and opportunities? (See also attachment D3 for current and potential areas of impact and adaptation response.)

On the basis of climate trends (see attachment D3), are there significant (+/-) implications for:

- a) current and potential climate change impacts;
- b) adaptive capacities/ resilience of those communities most impacted;
- c) the most vulnerable human communities; or
- d) current and proposed/ potential adaptation policies, strategies and other responses?

Considering these climate change implications, and the intrinsic uncertainties in climate projections, what are the characteristics of the decision sought?

- a) What level of uncertainty is associated with the implications?
- b) On what time scale (short/medium/long) are the implications likely to manifest themselves?
- c) Is there a monitoring/evaluation strategy to facilitate adaptive management?
- d) Is the proposal readily reversible or flexible if the implications turn out to be unacceptable?

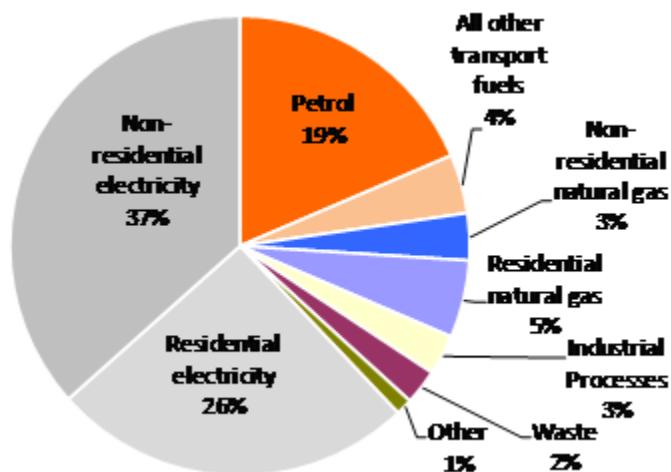
Attachment D2: Climate change mitigation assessment: summary of current sources and targets of ACT greenhouse gas emissions

It is expected that proposals will assess the contribution (positive or negative) to the ACT's climate change mitigation strategy and, in particular, the ACT Government's legislated greenhouse gas (GHG) reduction targets.

This could, for example, include assessment against some of the following questions.

- Does the proposal change overall energy demand and/or energy efficiency?
- Does the proposal change the sources of energy (for example, lower greenhouse gas emission fuels, non-renewable to renewable sources, use of waste)?
- Does the proposal change the potential for carbon sequestration?

Figure 6: ACT emissions disaggregated by sector



Source: ACT Greenhouse Gas Inventory (2008).

To assist in this assessment, the following table summarises the current main greenhouse gas sources and targets in kilotonnes CO₂-e for the ACT.

These are 'direct' greenhouse gas components as accounted for in the ACT Government (2010) ACT Greenhouse Gas Inventory 2008 and legislated 2020/2050/2060 targets. As noted in the climate change assessment process for the proposal (attachment D1), the proponents may also separately identify 'indirect' greenhouse gas impacts not included in the above figures.

Table 1: ACT emissions targets by sector

Source	1990 KtCO2-e	2008 KtCO2-e	2008 %	2020 KtCO2-e	2050 KtCO2-e	2060 KtCO2-e
Energy	2973	3935	94			
Industrial Processes	39	118	3			
Solvent and other product Use			0			
Agriculture	44	25	1			
Waste	187	104	2			
TOTAL	3244	4182	100			
LULUCF ^a	0	-28				
NET TOTAL	3244	4154		1946	649	0

^a LULUCF = 'land use, land use change and forestry' as per the Kyoto Protocol accounting rules and may include carbon sequestration and related offset activities.

Attachment D3: Climate change scenarios, impacts and adaptation assessment

Climate change projections suggest significant changes for the ACT, but are intrinsically uncertain, especially for rainfall. Decision-making, therefore, needs to reflect the likelihood and direction of change, and also the uncertainty in some key variables.

Bushfire

The risk of bushfire is expected to increase due to the increase in hotter and drier weather. For example, the number of days rated as high or extreme (under the old system) could increase significantly. The overall risk of bushfire is also likely to be exacerbated by fewer opportunities for hazard reduction burning. The extent and nature of impacts are likely to be different in forest areas (such as Namadgi) compared with grassy woodlands (such as the Canberra Nature Park) given the different fuel and topographical characteristics.

Extreme heat

Climate change is very likely to result in higher exposure to extreme heat as the number of hot days ($>35^{\circ}\text{C}$) and very hot days ($>40^{\circ}\text{C}$) are projected to increase. A key data gap identified is the prevalence and extent of the urban heat island effect — that is, localised city ‘heat traps’.

Flooding and storms

Since the 1970s, flood attenuation has been included as part of the integrated urban form. Open space, such as parks and ovals, is often used to manage and reduce potential flood hazards. The general ageing status of drainage infrastructure is an issue, as well as the need to incorporate anticipated climate change impacts into any new studies.

Water supply, quality and demand

The surface runoff feeding the ACT’s dams decreased from the mid-1990s. Climate projections indicate this trend is likely to continue or even worsen in the future. Water sources in the ACT are mostly rainfall dependent and, as such, are sensitive to any change in rainfall pattern. An understanding of the implementation of water saving initiatives at the suburb level would greatly improve vulnerability assessments.

Infrastructure

The ACT Government is releasing separately for public comment a discussion paper on climate change impact vulnerability assessment for public infrastructure.

Natural systems

Higher temperatures, more frequent and intense bushfires and the possibility of reduced rainfall will add to pressures on the quality of key catchment areas for the ACT, as well as on landscape function and biodiversity in all areas of the ACT — see, for example, (6) for an analysis on the Canberra Nature Park.

Most vulnerable communities

The most vulnerable in our society are those who will be most affected by the risks posed by impacts from climate change — that is, the very old, the very young, the sick, the poor and the least educated. In locating groupings of more vulnerable people, such as in old age residential complexes and hospitals, consideration needs to be given to mitigating all risks, including those that may be exacerbated by climate change.

As noted elsewhere, an integrated socioeconomic assessment of climate change implications for a specific proposal also needs to take account of the likelihood of increased pressure from climate change impacts, as well as from mitigation and adaptation interventions, on prices of key resources including energy, water and food, at least in key transition phases.