

1. While the overall environmental quality when all the developments are in place, i.e.- by 2011 was assessed in the Environmental Assessment of the Preferred Options for the Long Term Strategy, the present assessment is basically broadbrush in nature and serves to point out the relative environmental merits and demerits of the different options. Nonetheless, the analysis suggests that a number of the environmental problems will start to manifest themselves prior to 2006. Issues of particularly serious concern are: air quality deterioration linked to predicted increases in diesel-engined goods vehicle traffic, the overloading of environmental infrastructure, including especially the NT sewerage systems and the strategic landfills, and increases in impacts from traffic noise.
2. For the medium-term strategy to be environmentally viable, further actions will need to be undertaken to address air quality problems. As well, the provision of sufficient resources to upgrade environmental facilities and to deal with traffic noise problems is required as a matter of urgency. These issues and through strategic EIAs for the recommended strategic growth area.
3. The key issues and relative advantages and disadvantages of the options are summarised in Tables 14.1 and 14.2.

Table 14.1 Summary of Key Issues

Common Impacts	NT-Biased Option	HB-Biased Option	Recommended Strategy
<p><u>Effluent Disposal</u></p> <p>Treatment and disposal to optimise resources; strategic developments may overload existing and planned systems.</p> <p>Need to urgently review SMP's & DMP's to ensure phasing and timing of remedial/improvement measures is still appropriate</p>	<p>More problematic because of greater effluent generation in NWNT where levels of treatment are low and points of discharge often inappropriate (i.e. Pillar Point Outfall or via Shenzhen River to Deep Bay)</p>	<p>SSDS (I) will accommodate proposed developments but may need to expand some other facilities or accelerate SSDS(II)</p>	<p>Distribution of resources for improvement of collection, treatment and disposal schemes more cost effective than other options</p>
<p><u>Air Quality</u></p> <p>Although industrial emissions do not exceed the SO₂ trigger level, there is still the need to reduce emissions where possible.</p>	<p>The increase in SO₂ in Tuen Mun ACZ is slightly greater.</p> <p>Greater impact from vehicle traffic.</p>	<p>The increase in SO₂ in Harbour ACZ is slightly greater.</p> <p>The canyon effect will be intensified.</p>	<p>A balance of the SO₂ emissions budget over a greater area which should not place such stress at local level compared to other options.</p>

Table 14.1 Summary of Key Issues (Cont'd)

Common Impacts	NT-Biased Option	HB-Biased Option	Recommended Strategy
<p>Topography in Tuen Mun may constrain dispersion of pollution while the canyon effect in built environment of the metro area may create problems especially at a local level.</p> <p>Trigger level for AQOs NO₂ would be exceeded in Tuen Mun ACZ regardless of the options adopted. More stringent vehicle emissions controls and better transport-environmental policy are required.</p> <p>Dust levels need to be reduced from all sources as this is recognised as a major health hazard.</p>		<p>The large scale reclamation and construction works required in this option are likely create greatest impact, especially considering more population is proposed in the metro area.</p>	<p>Release of the emissions over wider area so local impacts not as severe as expected for other options.</p> <p>Both traffic and construction works will contribute but effects are more likely to be dispersed.</p>
<p><u>Solid Waste</u></p> <p>Domestic wastes need to be reduced as do construction wastes to extend the life of the disposal facilities.</p> <p>Collection and disposal issues are in urgent need of review.</p> <p>Disposal of sludge from Water Treatment Works and Sewage Treatment Works need to be reviewed.</p>	<p>Refuse Collection Points are more dispersed and the sea transport of wastes has not yet developed; therefore, longer trips for refuse vehicles. Local problems of air pollution, noise and congestion of the refuse vehicles likely to arise.</p>	<p>Higher potential for dust problems as materials are imported or exported to/from Metro for reclamation.</p> <p>Existing/planned refuse transfer facilities strategically developed in Metro but capacities need to be reviewed in future.</p>	<p>Balanced approach to collection and disposal which infers that greater number of people affected albeit to a lesser degree than for the other scenarios.</p>

Table 14.1 Summary of Key Issues (Cont'd)

Common Impacts	NT-Biased Option	HB-Biased Option	Recommended Strategy
<p><u>Noise</u></p> <p>High noise levels due to domestic traffic, offsite port back-up and construction activities. Noise impact needs to be mitigated at the project implementation stage</p>	<p>Greater potential impacts as the ambient level is relatively low.</p>	<p>Greater number of people potentially being affected</p>	
<p><u>Ecology</u></p> <p>Need to conserve and enhance significant ecological attributes</p>	<p>Problem associated with the need for infrastructure which could impinge on conservation areas. Increased threats to ecologically sensitive area, to high grade agricultural land and also to areas of high landscape value.</p>	<p>Potential loss of coastal habitats and seabed to be reviewed and appropriate mitigation measures to be developed</p>	<p>The overall potential adverse ecological impacts of each option to be reviewed to ensure a balanced development strategy is achieved.</p>