

Hon Cheung Hok-ming, SBS, JP  
Chairman  
Panel on Transport  
Legislative Council  
Legislative Council Building  
8 Jackson Road, Central  
Hong Kong

Dear Mr. Cheung,

**Hong Kong-Zhuhai-Macau Bridge ('HZMB') and public opposition to the Hong Kong Link Road ('HKLR') route**

The purpose of this letter is to urgently bring to the attention of the Panel on Transport the extent of public opposition to the proposed route of the HKLR of the HZMB after the bridge 'lands' in Hong Kong territory. **Tung Chung Sustainable Development** and other local organisations working to promote sustainable development have voiced concerns to the Highways Department regarding the impact of the proposed HKLR route and made counter proposals for a viable alternative. We request the Legislative Council Panel on Transport to urgently review the counter proposal and take account of the public opposition to the road route proposed by the Highways Department.

Details of the negative impact of the HD / Arup proposed route for the HKLR for the HZMB are in the attached documents. Most importantly, the proposed route will have a huge negative impact on the health of local residents because of the proximity of vehicle emissions from a major highway.

As management professionals we favour sustainable development and do not appose the construction of the HZMB, but we do object to the proposed route. We urge you to table the details of the **no pollution solution** to the Panel on Transport during your meeting on Friday 24<sup>th</sup> April.

Yours sincerely,

(Martin Purbrick)

for Tung Chung Sustainable Development Alliance

c.c. Hon Jasper TSANG Yok-sing, GBS, JP





## Alternative HK Link Road Route: Critical for Tung Chung



**No pollution solution for Tung Chung residents**

No air pollution

No noise pollution

No light pollution

# EXECUTIVE SUMMARY

- The proposed HK Link Road (HKLR) via Tung Chung Bay will have a negative and damaging impact on the local environment, residents quality of life, and the tourist attractions of Tung Chung and Lantau Island by:
  - Impacting the health and quality of life of residents of Tung Chung town centre and Yat Tung Estate Create by creating vehicle emissions and noise pollution within half a kilometer of Tung Chung town centre and Coastal Skyline residential development
  - Creating permanent damage to Tung Chung Bay and the surrounding Lantau Island coastline
  - Having a negative impact on the Lantau Island / Tung Chung tourist experience and for visitors using the Ngong Ping 360 cable car, with a potential economic impact by reducing the tourist attraction of the area
- There is an alternative route which is a **No Pollution Solution** for the HKLR. We propose to move the alignment of the planned HKLR north of the airport island and run the road through a tunnel parallel to the proposed third airport runway. The alternative HKLR route will:
  - Lessen vehicle emissions and noise pollution affecting Tung Chung residents as the road would be located out of sight of Tung Chung town centre
  - Avoid a negative impact on health of the Tung Chung population
  - Ensure there is no impact on the natural beauty of the Lantau coastline and Tung Chung Bay
- The alternative HKLR route will not have a negative affect on Chep Lap Kok airport expansion:
  - Airport safety is not affected by public roads running within the airport perimeter (e.g. roads running under runways, within the perimeter, and in close proximity to other major international airports include Schiphol, Heathrow, Charles De Gaulle, Heathrow, Gatwick, Sao Paulo)
  - Potential future reclamation for runway 3 and expansion of the airport will not be affected by the alternative route
  - Sha Chau and Lung Kwu Chau marine parks are several kilometers north west of the alternative road route and airport perimeter
  - Pink Dolphins re already affected by the HK Link Road as well as related construction
- The alternative route for the HKLR is critical for the future health and quality of life of Tung Chung residents. It is viable, no pollution for local residents, and is a ‘win-win’ solution for government and Tung Chung residents.

## Highways Department / Arup assumptions for the HKLR route are incorrect

	Highways Department / Arup	Tung Chung Sustainable Development
<b>HKLR via Tung Chung Bay</b>	HD / Arup contend that the HKLR will (1) not cause air, noise, & light pollution to Tung Chung residents, and (2) conflict with future planning.	(1) The route via Tung Chung Bay will create a 'vehicle emissions trap' affecting health of Tung Chung residents. (2) No development of Tung Chung Bay has been tabled or approved. Tung Chung residents will oppose the destruction of this major tourist attraction.
<b>Distance from coastline</b>	HD / Arup contend that the BCF to the west of CLK will be 2 km. from Tung Chung.	The BCF will be less than 2 km because of planned further extension of Tung Chung past the existing coastline. Vehicle emissions will be within 1 km. of new residential developments.
<b>BCF located west of CLK</b>	HD / Arup contend that the BCF west of CLK will (1) impact the natural setting, & (2) impact dolphin movement.	(1) The proposed west location of BCF will be well away from the Lantau coast. (2) Dolphins have returned to the Brothers islands (east of CLK). Swimming routes west of CLK are less impacted.

HKLR will create harmful vehicle emissions and noise pollution within half a kilometer of Tung Chung town centre and residential developments. A US university study shows that this brings direct harm to the health of the nearby population.

*“There is growing evidence of a distinct set of freshly-emitted air pollutants downwind from major highways, motorways, and freeways that include elevated levels of ultrafine particulates, black carbon, oxides of nitrogen, and carbon monoxide. People living or otherwise spending substantial time within about 200 m of highways are exposed to these pollutants more so than persons living at a greater distance, even compared to living on busy urban streets. Evidence of the health hazards of these pollutants arises from studies that assess proximity to highways, actual exposure to the pollutants, or both. Taken as a whole, the health studies show elevated risk for development of asthma and reduced lung function in children who live near major highways. Studies of particulate matter that show associations with cardiac and pulmonary mortality also appear to indicate increasing risk...suggesting localized sources that likely include major highways.”\**



\*Source: ‘Near highway pollutants in motor vehicle exhaust: A review of epidemiologic evidence of cardiac and pulmonary health risks’, Tufts University School of Medicine, Boston, USA (published 9 August 2007)

## HKLR will create a vehicle emissions trap between urban Tung Chung and the Chep Lap Kok island coastline

The HKLR via Tung Chung Bay brings an increase in vehicle emissions to within 0.5 km of residential areas and presents problems for dispersal of emissions because of the trapping effect of Lantau Island mountains. Vehicle noise pollution will also have a 24x7 impact on residents.

Dispersal of harmful pollutants will be hampered by vehicle emissions being trapped between the Lantau mountains and Tung Chung Bay, leaving Tung Chung as a smog zone.

The high traffic volume, vehicle speeds, number of trucks using the HKLR, the lack of emission controls on trucks in the Pearl River Delta area, and the surrounding terrain will contribute to a major harmful impact on pollution and noise for Tung Chung town centre, Yat Tung Estate, Fu Tung Estate, Tung Chung Crescent, Coastal Skyline and Caribbean Coast residential areas.



\*Source: 'Near highway pollutants in motor vehicle exhaust: A review of epidemiologic evidence of cardiac and pulmonary health risks', Tufts University School of Medicine, Boston, USA (published 9 August 2007)

## HKLR will create permanent damage to the surrounding Lantau Island coastline

The proposed HKLR landing point on the western side of Sha Lo Wan will cause a permanent ugly scar across the Lantau Island coastline.

The natural beauty of Sha Lo Wan will be destroyed forever and the lifestyle of the indigenous villagers destroyed by the impact of the road construction, the road impact on the ferry pier and ferry route, and the 24x7 ambient road noise.

The popular walking path that runs through the Lantau North Country Park from Tung to Tai O via Sha Lo Wan will be ruined by the HKLR impact on the natural beauty of the coastline as well as the road noise.



Photo 1, Source: Hong Kong Highways Department



## HKLR will create permanent damage to Tung Chung Bay

The proposed HKLR route through Tung Chung Bay will destroy a key feature of the Tung Chung new town: The natural beauty of the bay is central to the Tung Chung new town environment and a major attraction to residents, tourists and visitors.

The road will not only destroy the ambiance of the bay, but also impact local fishing.

Although the Lantau Island coast of the bay will be part of the HKLR route, the entire bay will be unviable as an attraction to new town residents, tourists and visitors because of the six lanes of traffic running along the airport coast.



Photo 1, Source: Hong Kong Highways Department

HKLR will have a negative impact on the Lantau Island / Tung Chung tourist experience and for visitors using the Ngong Ping 360 cable car, with a potential economic impact by reducing the tourist attraction of the area

The HKLR proposed route via Tung Chung Bay will create an ugly eyesore within clear view of the tourists and visitors to the Ngong Ping 360 cable car. What is now a beautiful open view of an un-spoilt coastline and green waters will become a view of a narrow muddy channel bounded by a busy six lane highway carrying diesel smoke emitting heavy goods vehicles 24x7.

MTR, the cable car operator, states on their website that “Ngong Ping 360 is destined to be one of Hong Kong's 'must see' attractions. Preserving the natural ecological environment and features of the Ngong Ping area and converging the custom and culture of the Lantau Island, Ngong Ping 360 is sure to refresh your body and enlighten your mind, as soon as you step on the Cable Car.”\*



The proposed route of the HKLR will create an eyesore that will be damaging to tourist business created by attractions such as the Ngong Ping 360 cable car.

\* Source: [www.np360.com.hk](http://www.np360.com.hk) ; photographs courtesy of NP360 Image Library

There is an alternative route for the HKLR. Designing Hong Kong proposes, as a first step, to move the alignment of the planned HKLR north of the airport island and run the road through a tunnel parallel to the proposed third airport runway.

The HKLR can be routed north of the airport to avoid any impact on Sha Lo Wan, Tung Chung Bay and town centre, Scenic Hill, and residential areas. The alternative route would not impact any future additional airport runway expansion, which could be accessed over a tunnel portion of the HKLR. The BCF can be located on the west side of the airport, away from residential areas and offshore from the Lantau coastline.

The vehicle emissions from the HK Link Road would be at a sufficient distance from Tung Chung residential areas so that dispersal takes place before a major impact on the urban population. The distance of the road from the urban areas will have a key benefit to the health of the local population.





## The alternative HKLR route will not have a negative affect on Chep Lap Kok airport

Airport safety is not affected by public roads running within the airport perimeter. There are many examples of public roads running under runways, within the perimeter, and in close proximity to other major international airports include Schiphol, Heathrow, Charles De Gaulle, Heathrow, Gatwick, Sao Paulo (see Appendix pages).

Schiphol airport in the Netherlands has a major road tunnel running under one of the runways as well as a a network of public roads in close proximity to the airport perimeter and other runways. Security and safety are not compromised and can be integrated in the airport planning process.

Comparisons between Chep Lap Kok and Schiphol airports reveal that passenger numbers are similar: In 2007 CLK carried 47.8m passengers, and Schiphol carried 47.793m passengers. Schiphol is one of Europe's busiest cargo airports. If an airport of the size and complexity of Schiphol can run a safe and best in class airport with a major public road running via a tunnel under a runway, why cannot Hong Kong ?



Part of the Netherlands A4 road is the Schiphol-tunnel, which crosses the Buitenveldert landing strip of Schiphol airport





Moving the BCF west is better for the Pink Dolphins, which now primarily use the Brothers Islands, East of the Airport.

Pink Dolphins swimming and living off the Lantau Island coast are affected by the massive construction works for the Zhuhai-Macau-HK bridge. Dolphin swimming areas north of the airport have been affected by past airport construction and that habitat lost. Moving the BCF to the west of the airport will benefit the Pink Dolphins as their swimming routes to the Brothers Islands will be unaffected.

***“Constructing the proposed Tuen Mun-Chep Lap Kok Link will inevitably mean damage to the dolphin habitat, and even life threatening to the dolphins, considering the amount of noise, pollution and damage to the sea bed involved.***

***As dolphin watchers, we find it utterly ironic that two pink dolphins are featured at the front page of the Concept Plan. If all the reclamation and development are to be carried out as planned, where do we leave for the dolphins? According to our experience, dolphins are every now and then seen very close to the shore of Siu Ho and Tai O, particularly in the summer. We have already taken away the dolphins’ core habitat at Chep Lap Kok, the least we can do is to stop destroying the sea and marine ecology there. Dolphins need a reasonable size of habitat that allows free ranging for food and socializing, further shrinking our dolphins’ habitat will make it more and more difficult for the existing population to sustain.***

***We urge the Government to seriously reconsider all the reclamation plans along the Lantau coastline as the first step to better protect the dolphins and nature. We would like to see more areas being assigned as protection areas, and the proposed marine park should expand to cover the waters off Tai O which is an area used by dolphins and finless porpoises.” \****

## Conclusions

The proposed route of the HK Link Road will have a hugely damaging effect on the quality of life of Tung Chung residents. Vehicle emissions will be harmful to this and future generations of residents.

The natural beauty of Lantau Island coastline and Tung Chung Bay will be decimated. Residents, visitors, and tourists will suffer.

There is an alternative route for the HK Link Road. The road can run north of the airport and still join with the planned Border Crossing Facilities.

The alternative route is a win-win solution for Tung Chung residents, the Hong Kong tourist industry, and the Hong Kong Government as the leader of the project.

The HK Link Road route must be altered, for **no pollution solution** and a sustainable Tung Chung.



## Appendix - Major airports with roads crossing airport area or running adjacent to the airport



# CHARLES DE GAULLE AIRPORT, FRANCE



Source: Google Earth



# HEATHROW AIRPORT, UK



Source: Google Earth



# GATWICK AIRPORT, UK



Source: Google Earth



Source: Google Earth

