



# GHD Ventilation Engineering

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

**We offer a diverse range of ventilation services for tunnels and industrial applications. Our integrated teams are equipped with industry-leading knowledge from design to construction, commissioning and maintenance in a range of environments including road, rail, wastewater and services tunnels.**

### **Here's what we do:**

- Design tunnel ventilation systems to maintain air quality during normal tunnel operations and control smoke movement to assist in occupant egress during a fire event
- Design industrial ventilation systems for odour, corrosion and dust control in wastewater plants and other process applications
- Design construction ventilation systems for tunnelling and mining projects
- CFD modelling of smoke movement in tunnels and subway stations
- Dynamic modelling of air movement in tunnels to reduce on site commissioning
- Plume modelling at tunnel portals and ventilation outlets

- Assessment of existing tunnels and industrial plants and optimise for more efficient operation
- Provide our clients with planning and design services as well as construction and commissioning support
- Whole of life costing for ventilation plant operation

### **Other services include:**

- Traffic modelling
- Acoustic assessment of ventilation plant noise and vibration within the project and at external sensitive receptors
- Environmental services

**For further information and your local contact, visit**

**[www.ghd.com/tunnels](http://www.ghd.com/tunnels)**



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