



The Four P's – Our Sustainability Framework





"Providing a safe, healthy and fulfilling workplace"



"Building quality infrastructure and reducing our impact on the environment"



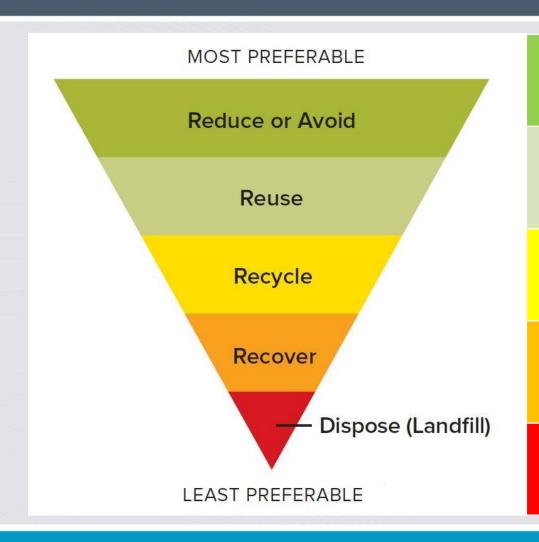
"Running a strong and successful business so we can fulfil our purpose"



"Doing Good Work together"







Build perpetual pavements i.e. EME2 + thin surfacing

Reuse of concrete pavers

There is little application for asphalt pavements

(no re-processing involved)

Recycling as new resource RAP, CR, glass, etc. (re-processing involved)

Recovering its energy content
There is little application for asphalt pavements

Dispose - landfill

Considerations



- Objectives of using sustainable asphalt mixes:
 - Reducing cost and reducing CO2. The two are pretty much the same.
 - Increasing in-service life. Using truly engineered products.
- > Risk management:
 - Use standard and registered asphalt mixes. A lot can be achieved with this pathway.
 - Consider using non-standard mixes and out of the box thinking. Requires engineering assessment.
- Appetite for risk sharing if the contractor is a trusted partner (joint-venture) and not just a supplier. A lot more happens.
- ➤ Mechanism is needed for network wide rollout after successful trials to put sustainability really to work. There are options sitting in the drawer.
- ➤ At FH we only develop and use truly sustainable products if a product fails well before its intended in-service life that is not sustainability. It is wasting resources and energy.

Recycling and performance



Asphalt mix	Speciality	Performance	Life cycle cost	Recycling
GGA14(CR)(W) OG10(CR)(W)	Crumb rubber Crack retention	$\uparrow \uparrow$	oach.	个个
TyrePhalt(15R)(10G)(S) AC14H(15R)(Polycrumb)(S)	Crumb rubber / RAP / glass	- 6011010	DE STREET	个(个)
EME2(10R) / EME2(10R)(S)	Extremely high performine and High stiffness of the High stiffness	S EIPP	Walle A	↑
AC20H(600)(15R)(5G/10G)	5 to % Fryshed glass	Thomas	\leftrightarrow	$\uparrow \uparrow$
AC14H(PlastiBind)(15R)	MISCORecycle A PARTIES 35	↑	\downarrow	\uparrow
AC20H(30R) EME2(30R)	RECVENIENT	\uparrow / \leftrightarrow	\downarrow	$\uparrow \uparrow$
SMA10 / SMA7	Thin asphalt	$\uparrow \uparrow$	$\downarrow \downarrow$	\leftrightarrow

Data supported paving process







Sustainable asphalt mixes







Sustainable asphalt mixes







