

	Diesel	LPG	20% BioLPG Blend	40% BioLPG Blend	60% BioLPG Blend	80% BioLPG Blend	BioLPG
Upstream (WTT) Emissions (kgCO ₂ e/kWh)	0.0626	0.0272	0.0300	0.0328	0.0355	0.0383	0.0411
Direct (Tailpipe) Emissions (kgCO ₂ e/kWh)	0.2696	0.2303	0.1843	0.1383	0.0923	0.0463	0.0003
Sources	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>
Assumptions	Linear trend assumed with blend						7.08kWh per litre
Effective Total Emission Factors (kgCO ₂ e/kWh)	0.3322	0.2575	0.2143	0.1711	0.1278	0.0846	0.0414
%CO ₂ savings		Diesel vs. LPG = 22.4%		Diesel vs. 40%BioLPG – up to 48% LPG vs.40%BioLPG = up to 33%			Diesel vs. BioLPG = up to 87% LPG vs BioLPG = up to 83%

	Heating Oil	LPG	20% BioLPG Blend	40% BioLPG Blend	60% BioLPG Blend	80% BioLPG Blend	BioLPG
Upstream (WTT) Emissions (kgCO₂e/kWh)	0.0540	0.0272	0.0300	0.0328	0.0355	0.0383	0.0411
Direct (Tailpipe) Emissions (kgCO₂e/kWh)	0.2596	0.2303	0.1843	0.1383	0.0923	0.0463	0.0003
Sources	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>	<u>BEIS</u>
Assumptions	Linear trend assumed with blend						7.08kWh per litre
Effective Total Emission Factors (kgCO₂e/kWh)	0.3136	0.2575	0.2143	0.1711	0.1278	0.0846	0.0414
% of CO₂ savings		LPG vs Oil = 17.8%		Oil to 40%BioLPG = up to 45% LPG to 40%BioLPG – up to 33%			Oil to 100%BioLPG = up to 86% LPG to 100% BioLPG = up to 80%