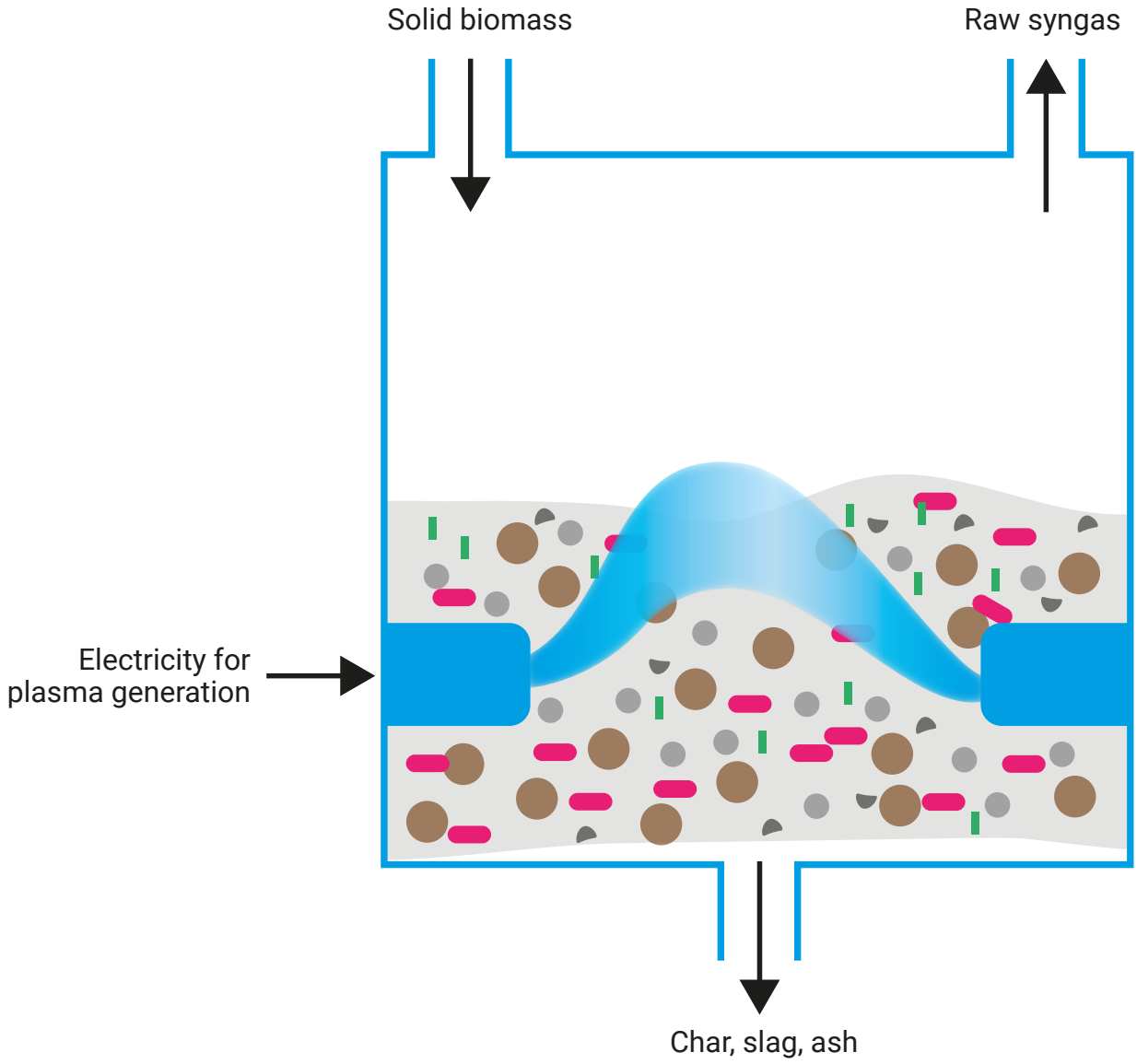
Plasma gasification of biomass

sbh4 consulting



	Plasma gasification of biomass
Biomass feedstock	Municipal solid waste, waste water treatment sludge, woody biomass, waste paper, etc
Target chemical reactions	Biomass + O_2 → 2CO + $4H_2$ Biomass + H_2O → CO + $3H_2$
Additional side reactions	Biomass + $2O_2$ → CO_2 + $2H_2O$
Syngas composition	38% H_2, 30% CO, 20% CO_2, 12% CH_4
Product gas pressure	From atmospheric pressure to 30 bar
Product gas temperature	~1,000 °C