

Why KENTEC ?



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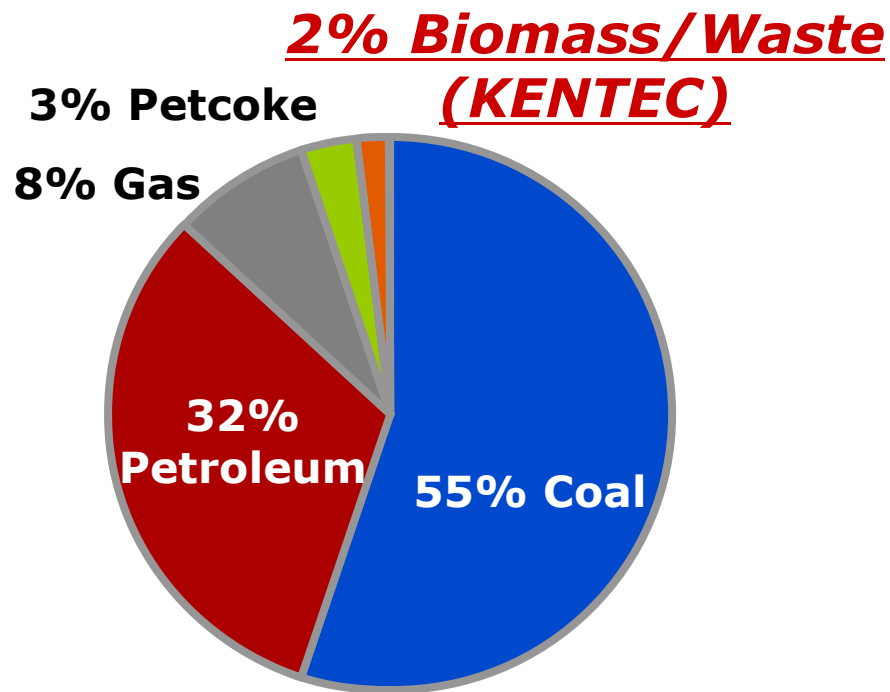
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MARKET GROWTH IS EXPECTED

- World gasification capacity is projected to grow by more than 70% by 2015 (by 2020, market size will be \$20 billion US).
- With deregulation, rapidly changing market demands, fluctuation in natural-gas prices, and increased environmental concerns, gasification will become the cornerstone technology for market flexibility
- CO₂ management will be required (carbon credit).

MARKET GROWTH IS EXPECTED

Coal, Petroleum, Gas, Petcoke are all ***Fossil fuels!***



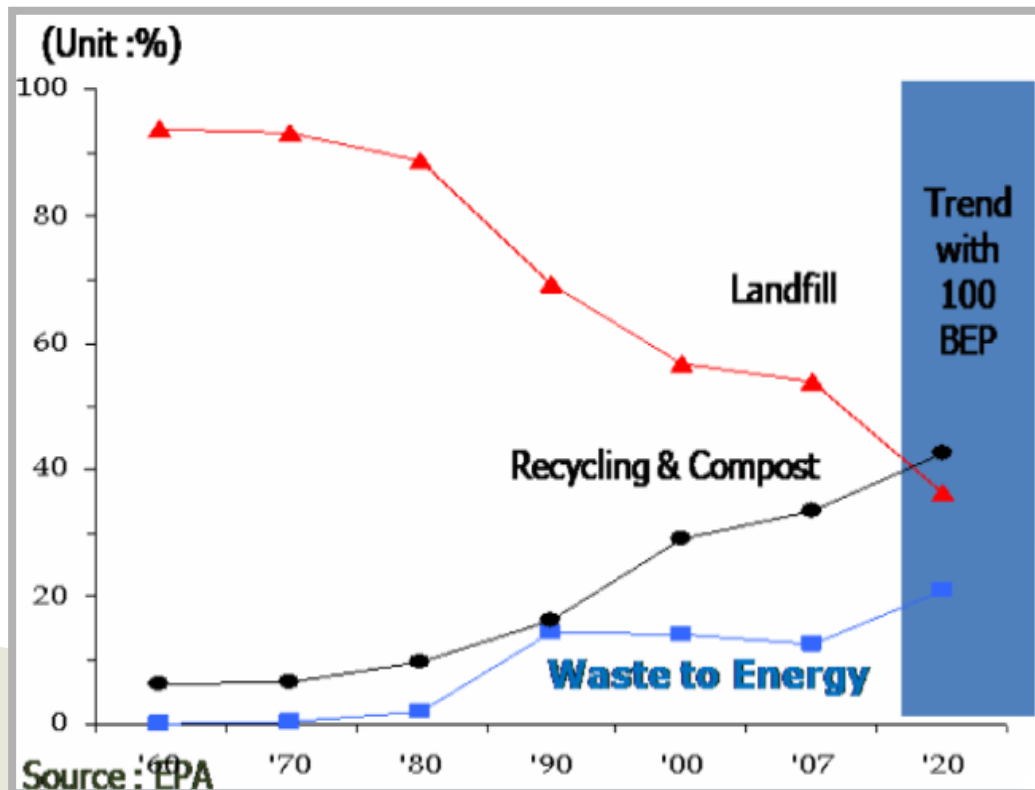
KENTEC uses waste as an energy source (only 2% of global syngas output is from waste; 98% from fossil fuels – **continuous market growth is expected**)

Global syngas output by feedstock

Source: Gasification Technology Council

MARKET GROWTH IS EXPECTED

- Tremendous amount of **wastes are produced daily**
- **Landfill tax** will be dramatically increased
- **Fossil fuel price** are rising



COUNTRY	LANDFILL TAX (EURO/TON)
Denmark	50
Belgium	55
France	10
Netherlands	75
Norway	40
Sweden	31

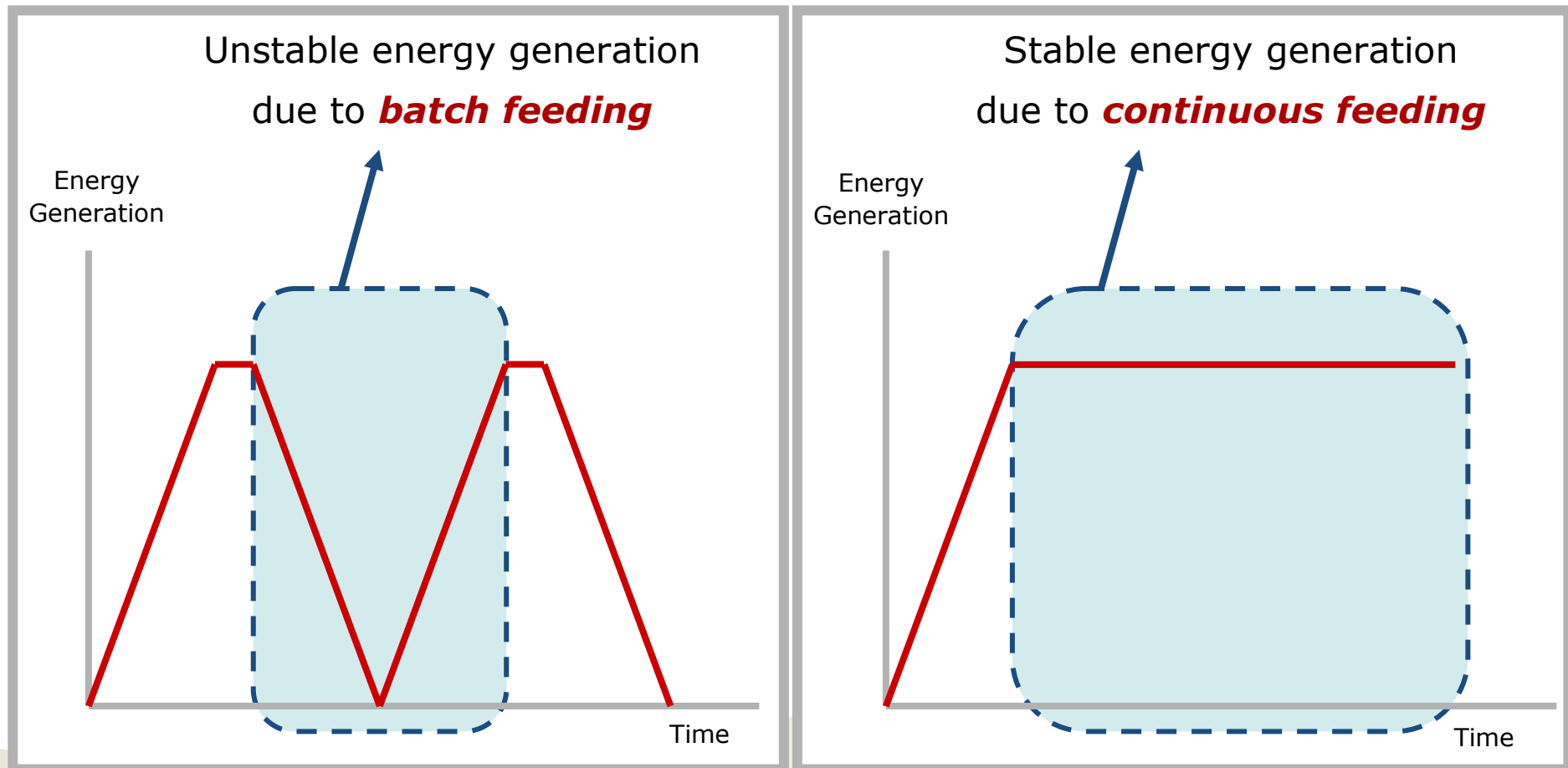
Source: OECD, Strategy Unit and Enviros

WIDE RANGE OF FEEDSTOCK

- KENTEC gasification system can process a wide range of materials, ***including hazardous wastes.***
- Mainly, stoker type processes living wastes, but KENTEC can process living wastes, industrial wastes, medical wastes, food wastes, green wastes (trees, grasses, etc.), residues (corn, palm, sugar cane, etc.), livestock excretions and wastewater sludge (***up to 70% of moisture contents can be processed***).
- Currently, KENTEC contracted ***nuclear waste reduction project*** in Korea

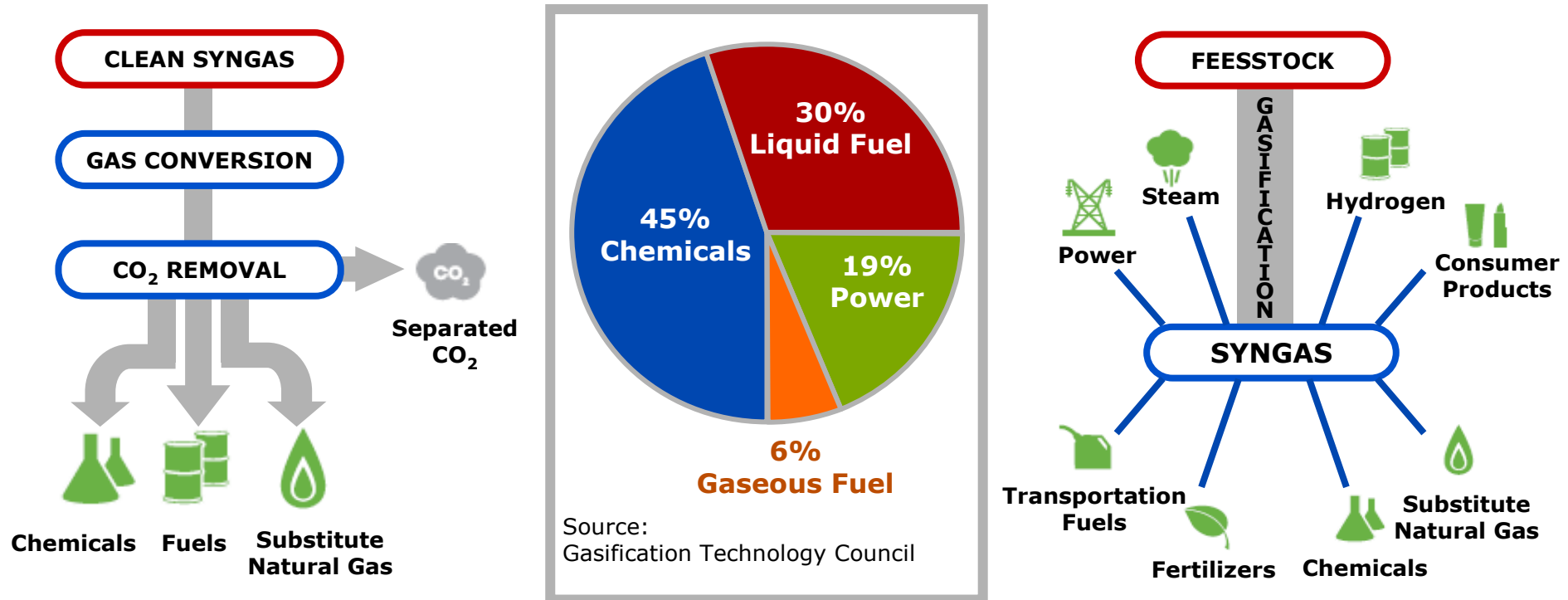
CONTINUOUS FEEDING

KENTEC's continuous feeding system guarantees stable energy generation.



Electricity supply shortages, and sharp natural gas price fluctuations worldwide, highlight the need for a secure energy supply at stable prices.

MULTIPLE, HIGH VALUE PRODUCTS



- KENTEC enables electricity production with co-products (fuels, chemicals, hydrogen, and steam).
- Sale of value added by-products from waste streams and minimization of waste disposal can substantially improve the economic issues.
- By-products include pressurized CO₂, ash/slag, sulfur and/or sulfuric acid, hydrogen, ammonia and etc.

PERFORMANCE ADVANTAGES

Operation conditions by company

Company Name	EPI	Stein	Tampella	SEI	Purox	Sofresid	Aerimpianti	Lurgi	KENTEC
Primary Feedstock	Wood	Wood	Wood	Wood	MSW	MSW	RDF	Bark	MSW
Throughput (Ton/Day)	100	60	45	180	180	195	45-100	85-100	20-200
Pressure (Bar)	1	15	20	1	1	1	1	1	1
Temperature	650	700	850	650	-	1,300	850	800	1,000
Reactant 1	Air	O ₂	Air	Air	O ₂	Air	Air	Air	Air
Reactant 2	-	Steam	Steam	-	-	-	-	-	Steam
Gas Output (m ³ /h)	8,793	2,900	-	4,845	-	33,960	3,500-14,000	9,500-12,000	8,000-20,000
Exit Temp (°C)	621	-	300	800	-	-	800	600	850
Heating Value	5.6	5.5	5.0	5.7	-	7.9	5.0	5.8	12-14

Source: U.S. Department of Energy National Energy Technology Laboratory

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■ Power generation

- Sterling Engine development - MOU with Infinia in US who has the most effective electric generation technology (45%-55%) in the world

■ Emission "0" Project

- Kentec already designed the plant of Pure Oxygen injection plant which will use full CO₂ from stack
- This will be world unique energy plant without emission and will make huge carbon credit revenue