

# Small scale

	Wood Stoves	Fireplaces	Pellet stoves	Boilers for firewood	Boilers for wood chips	Boilers for pellets and grain	Boilers for straw	Stoker systems
ABC Hansen A/S					✓	✓	✓	✓
Alcon ApS Ingeniørfirma				✓	✓	✓	✓	✓
Argusfyr Energiteknik A/S								✓
BAXI A/S						✓		
CN Maskinfabrik ApS						✓	✓	✓
Danergi A/S	✓	✓	✓	✓	✓	✓		
Danish Energy Systems A/S					✓		✓	✓
DanTrim A/S					✓	✓		✓
Interforst K/S	✓			✓	✓	✓		
Jydepejsen A/S	✓							
Karby Smede- og Maskinværksted I/S				✓	✓	✓		✓
LIN-KA Maskinfabrik A/S			✓		✓	✓	✓	✓
Lotus Heating Systems A/S	✓			✓	✓	✓		
Maskinfabrikken Faust ApS				✓	✓	✓	✓	✓
Multiservice ApS						✓		✓
Overdahl Kedler			✓	✓	✓	✓	✓	✓
Passat Energi A/S				✓	✓	✓	✓	✓
Pilevang A/S						✓	✓	
Power Matic					✓	✓		✓
Primdal & Haugesen				✓	✓			
PVM Bio Energy					✓	✓		✓
Rais A/S	✓	✓						
REKA A/S			✓	✓	✓	✓	✓	✓
SKELTEK							✓	
Sydthy Maskin Center								✓
TK Energi								✓
TWIN HEAT					✓	✓		✓

# Large boiler systems

	Wood chips, below 1 MW	Pellets, below 1 MW	Straw, below 1 MW	Wood chips, more than 1 MW	Pellets, more than 1 MW	Straw, more than 1 MW	Consultancy
Aalborg Energie Teknik A/S							✓
Alcon ApS Ingeniørfirma	✓	✓	✓	✓	✓	✓	
Ansaldo Vølund A/S				✓	✓	✓	
Argusfyr Energiteknik A/S	✓	✓		✓	✓		
COWI Consulting Engineers & Planners A/S							✓
Danergi A/S	✓	✓		✓	✓		
Danish Energy Systems A/S	✓		✓	✓		✓	✓
Danish Fluid Bed Technology							✓
Danish Technical University - Department of Chemical Engineering							✓
Danish Technological Institute, Section of Biofuels							✓
Dansk Energi Management A/S							✓
Danstoker A/S	✓	✓	✓	✓	✓	✓	
DanTrim A/S				✓	✓		
dk-TEKNIK ENERGY & ENVIRONMENT							✓
ELSAMPROJEKT A/S							✓
Esbensen Consulting Engineers A/S							✓
EURO THERM A/S	✓	✓	✓	✓	✓	✓	
FLS Miljø A/S				✓	✓	✓	✓
Hedeselskabet							✓
Høllensen Ingeniør- og Kedelfirma ApS		✓		✓	✓	✓	
Interforst K/S	✓	✓					
Justsen Energiteknik A/S	✓	✓	✓	✓	✓	✓	
KEM A/S				✓	✓	✓	
LIN-KA Maskinfabrik A/S	✓	✓	✓	✓	✓	✓	
Maskinfabrikken Faust ApS	✓	✓	✓	✓	✓		
NIRAS							✓
NIRAS							✓
Overdahl Kedler	✓	✓	✓	✓	✓	✓	
Passat Energi A/S	✓	✓	✓				
Pilevang A/S			✓				
Plan & Projekt A/S							✓
PlanEnergi							✓
Power Matic	✓	✓					
RAMBØLL							✓
REKA A/S	✓	✓	✓	✓	✓	✓	✓
SKELTEK			✓			✓	
Tjæreborg Industri A/S				✓	✓		
TK Energi						✓	✓
TWIN HEAT	✓	✓					
WEISS A/S	✓	✓		✓	✓	✓	

# Combined heat and power systems

	Straw	Wood	Other fuels	Steam based systems	Gasification	Other technologies	Consultancy
Aalborg Energie Teknik A/S		✓	✓	✓			✓
ABB ALSTOM POWER FlowSystems Denmark							✓
Ansaldo Vølund A/S	✓	✓	✓	✓	✓	✓	
Argusfyr Energiteknik A/S	✓	✓					
Birch & Krogboe A/S							✓
Burmeister & Wain Scandinavian Contractor A/S (BWSC)						✓	
Carl Bro A/S, Energy and Environment							✓
CILAJ Energi A/S			✓			✓	
COWI Consulting Engineers & Planners A/S							✓
Danish Energy Systems A/S	✓	✓	✓	✓			✓
Danish Fluid Bed Technology							✓
Danish Technical University - Department of Chemical Engineering							✓
Danish Technological Institute, Section of Biofuels							✓
Dansk Energi Management A/S							✓
DanTrim A/S		✓	✓				
dk-TEKNIK ENERGY & ENVIRONMENT							✓
ELSAMPROJEKT A/S							✓
Esbensen Consulting Engineers A/S							✓
EURO THERM A/S	✓	✓		✓			
FLS Miljø A/S	✓	✓	✓	✓			✓
Hedeselskabet							✓
Hollensen Ingeniør- og Kedelfirma ApS		✓		✓	✓		✓
Justsen Energiteknik A/S			✓	✓			
KEM A/S	✓	✓	✓	✓			
LIN-KA Maskinfabrik A/S	✓	✓					
NIRAS							✓
Overdahl Kedler	✓	✓	✓				
Plan & Projekt A/S							✓
PlanEnergi							✓
RAMBØLL							✓
REKA A/S	✓	✓			✓		✓
Tjæreborg Industri A/S			✓				
TK Energi	✓				✓		✓
WEISS A/S	✓	✓	✓			✓	

# Biogas

	Farm scale systems	Large scale systems	Components	Consultancy
A-Consult A/S	✓	✓	✓	✓
Bioenergy Department, University of Southern Denmark				✓
Burmeister & Wain Scandinavian Contractor A/S (BWSC)		✓		
Carl Bro A/S, Energy and Environment				✓
COWI Consulting Engineers & Planners A/S				✓
Danish Biogas Technology A/S	✓	✓	✓	✓
Danish Institute of Agricultural Sciences				✓
Dansk Energi Management A/S				✓
Hedeselskabet				✓
Lundsby Industri A/S	✓			
NIRAS				✓
NIRAS				✓
PlanEnergi				✓
RAMBØLL				✓
The Danish Agricultural Advisory Centre				✓
TK Energi	✓		✓	✓

# Fuel handling

	Straw dividers, chaff cutters	Wood chipping equipment	Peletizing and briquetting equipment	Storage and transport systems	Cultivation and harvesting equipment	Others
ABC Hansen A/S	✓	✓	✓	✓		
Alcon ApS Ingeniørfirma				✓		
Ansaldo Vølund A/S	✓					
C.F. Nielsens Maskinfabrik A/S			✓			
CN Maskinfabrik ApS	✓					
Danish Energy Systems A/S		✓		✓		
EURO THERM A/S	✓					
FLS Miljø A/S	✓	✓		✓		
Geert Olesens Maskinfabrik			✓	✓		
Hvidsted Energy Forest					✓	Energy crop
Justsen Energiteknik A/S		✓		✓		
KEM A/S	✓			✓		
Linddana A/S		✓				
LIN-KA Maskinfabrik A/S	✓					
Maskinfabrik ACTA A/S	✓	✓	✓			Shredders for wood waste
NHS Maskinfabrik A/S		✓				
Niro Industries A/S	✓					
Passat Energi A/S	✓					
Primdal & Haugesen				✓		
REKA A/S	✓					
Scanhugger-Hedetræ A/S		✓				
Silvatec		✓				
SKELTEK	✓					
Sprout-Matador A/S			✓			
Tim Environment Products A/S		✓				Shredding and separation equipment for wood
TK Energi	✓				✓	Boiler feeding systems
WEISS A/S	✓	✓	✓	✓		

# Related services

	Heating network systems	Flue gas cleaning equipment	Fuel analyses	Research and development	Others
Aalborg Energie Teknik A/S		✓	✓	✓	
ABB ALSTOM POWER FlowSystems Denmark	✓				
AC Energy ApS				✓	Development of Stirling engine CHP system
Alcon ApS Ingeniørfirma	✓	✓		✓	Steel chimneys, heat storage tanks, licence production
Ansaldo Vølund A/S				✓	
Bioenergy Department, University of Southern Denmark				✓	Biomass resource R&D&Di
Brandt - Produkt & Udvikling				✓	Industrial Design
Burmeister & Wain Scandinavian Contractor A/S (BWSC)	✓				
COWI Consulting Engineers & Planners A/S				✓	Risk & Impact Analyses
Danish Fluid Bed Technology				✓	Fluid Bed Combustion, Gasification and Pyrolysis
Danish Institute of Agricultural Sciences				✓	Straw & Energy Crop Research
Danish Institute of Agricultural Sciences				✓	Energy crops
Danish Technical University - Department of Chemical Engineering				✓	
Danish Technical University - Department of Energy Engineering				✓	Gasification
Danish Technological Institute, Section of Biofuels			✓	✓	Emission tests, test laboratory for boilers, consultancy on energy crops
dk-TEKNIK ENERGY & ENVIRONMENT			✓	✓	Development of gasification technologies, approved emission measurements
ELSAMPROJEKT A/S			✓	✓	
EMU				✓	
EURO THERM A/S		✓			
FLS Airloq A/S			✓		Emission measurement, HCL, O <sub>2</sub> , CO, NO <sub>x</sub> , SO <sub>2</sub>
FLS Miljø A/S		✓			
The Danish Forest and Landscape Research Institute				✓	Consultancy on wood fuels
Hollensen Ingeniør- og Kedelfirma ApS		✓			
Justsen Energiteknik A/S		✓			
KEM A/S		✓			
Løgstør Rør A/S	✓				
OKR Cleaning		✓			
Plan & Projekt A/S				✓	Planning and implementation of energy projects
PVM Bio Energy				✓	
Simatek A/S		✓			
Sprout-Matador A/S		✓			
Star Pipe A/S	✓				
Tjæreborg Industri A/S		✓			
TK Energi		✓		✓	
WEISS A/S		✓			



This catalogue provides an overview of the Danish bioenergy sector. It describes a variety of Danish solutions to the challenge of utilising wood, straw and animal waste for an environmentally desirable and CO<sub>2</sub> neutral energy production in small as well as large scale systems. It furthermore describes the recent development within some promising technologies for biomass based combined heat and power generation. The catalogue contains an index of Danish companies providing products or consultancy within the bioenergy sector. The catalogue has been prepared with financial support from the Danish Energy Agency.