What is claimed is:

1. A method for generating electrical power comprising:

processing a first energy source in a first boiler to produce a first steam flow;

processing a biomass fuel source in a biomass boiler to produce a second steam flow, wherein the biomass fuel source is different than the first energy source;

combining the first steam flow and the second steam flow;

routing the combined steam flow through a steam turbine generator;

recirculating a first portion of an output of the steam turbine generator for reheating in the biomass boiler;

reheating the first portion of the output in the biomass boiler to generate a first reheated steam; and

delivering the first reheated steam to the steam turbine generator.

2. The method of claim 1 wherein the steam turbine generator comprises two or more sections and the first portion of the output is obtained from a first section of the steam turbine generator and the reheated steam is delivered to a second section of the steam turbine generator.

3. The method of claim 1 further comprising:

recirculating a second output of the steam turbine generator for reheating in the first boiler to generate a second reheated steam; and

delivering the second reheated steam to the steam turbine generator.

4. The method of claim 1 further comprising:

collecting water at a condenser;

heating the water; and

using the heated water for the processing of the first energy source and the biomass fuel source.

5. The method of claim 1 wherein the first energy source is selected from group consisting of natural gas, fossil fuel, coal, and solid fuel.

6. The method of claim 1 wherein the biomass fuel source is selected from one or more of the group of green tree chips, forest residues, yard clippings, wood chips, urban waste wood, construction and demolition waste wood, sugar cane fiber, tires, municipal solid waste, refuse derived fuels, and agricultural waste.

7. The method of claim 1 wherein the steam turbine generator is a utility grade steam turbine generator.

8. The method of claim 1 wherein the first boiler is a heat recovery steam generator.

9. The method of claim 1 wherein the first boiler is a coal boiler.

10. The method of claim 1 wherein the first boiler is a solid fueled boiler.

11. The method of claim 1 wherein the first boiler is a fossil fuel boiler.

12. A method for generating electrical power comprising:

processing a first energy source in a first boiler to produce a first steam flow;

processing a biomass fuel source to produce a second steam flow;

combining the first steam flow and the second steam flow;

routing the combined steam flow through a steam turbine generator;

recirculating a first portion of the output of the steam turbine generator for reheating in the biomass boiler to generate a first reheated steam; and

delivering the first reheated steam to the steam turbine generator;

collecting water at a condenser;

heating the water; and

delivering the heated water as feed water for the processing in the first energy source and the biomass fuel source.

13. The method of claim 12 further comprising:

recirculating a second output of the steam turbine generator for reheating in the first boiler to generate a second reheated steam; and

delivering the second reheated steam to the steam turbine generator.

14. A system for generating electricity comprising:

a first component for producing a first steam flow from a first energy source;

a second component for producing a second steam flow from a biomass fuel source, wherein the biomass fuel source is different than the first energy source;

a steam line which combines the first and second steam flows; and

a steam turbine generator which extracts energy from the combined steam flow;

a reheat steam line loop for reheating a first portion of an output in the biomass boiler to generate reheated steam, wherein the first portion of the output is received from a first section of the steam turbine generator and the reheated steam is delivered to a second section of the steam turbine generator.

15. The system of claim 14 further comprising:

a second reheat steam line loop for reheating a second portion of the output in the first component to generate a second reheated steam, wherein the second reheated steam is delivered to the second section of the steam turbine generator.

16. The system of claim 14 further comprising a condenser.

17. The system of claim 14 wherein the first energy source is selected from the group consisting of natural gas, fossil fuel, coal, and solid fuel.

18. The system of claim 14 wherein the biomass fuel source is selected from one or more of the group of green tree chips, forest residues, yard clippings, wood chips,

urban waste wood, construction and demolition waste wood, sugar cane fiber, tires, municipal solid waste, refuse derived fuels, and agricultural waste.

19. The system of claim 14 wherein the steam turbine generator is a utility grade steam turbine generator.

What is claimed is:

1. A method for generating electrical power comprising:

processing a first energy source to produce electricity via a coupled generator, a first exhaust combusted gas, and a by-product first steam flow via a coupled heat recovery steam generator;

processing a biomass fuel source, separately from the processing of the first energy source and the first exhaust combusted gas, to produce a second steam flow at matched temperature and pressure conditions to the by-product first steam flow, wherein the biomass fuel source is different than the first energy source and the matched temperature and pressure conditions are adjustable based on temperature and pressure conditions for the by-product first steam flow or the second steam flow;

combining the by-product first steam flow and the second steam flow, wherein the steam flows are combined after the by-product first steam flow is processed through the heat recovery steam generator and the combined steam flow is at or below a maximum flow of the by-product first steam flow produced from the first energy source via the coupled heat recovery steam generator; and

routing the combined steam flow through a steam turbine generator.

2. The method of claim 1 further comprising:

recirculating an output of the steam turbine generator for reheating;

reheating the steam; and

delivering the reheated steam to the steam turbine generator.

3. The method of claim 2 wherein the steam turbine generator comprises two or more sections and the output is obtained from a first section of the steam turbine generator and the reheated steam is delivered to a second section of the steam turbine generator.

4. The method of claim 1 further comprising:

collecting water at a condenser;

reheating the water; and

using the reheated water for the processing of the first energy source and the biomass fuel source.

5. The method of claim 1 wherein the first energy source is natural gas, fossil fuel, coal, or any combination thereof.

6. The method of claim 1 wherein the biomass fuel source is selected from one or more of the group of green tree chips, forest residues, yard clippings, wood chips, urban waste wood, construction and demolition waste wood, sugar cane fiber and agricultural waste.

7. The method of claim 1 wherein the steam turbine generator is a utility grade steam turbine generator.

8. A method for generating electrical power comprising:

processing a first energy source to produce electricity via a coupled generator, a first exhaust combusted gas, and a by-product first steam flow via a coupled heat recovery steam generator;

processing a biomass fuel source, separately from the processing of the first energy source and the first exhaust combusted gas, to produce a second steam flow at matched temperature and pressure conditions to the by-product first steam flow and the matched temperature and pressure conditions are adjustable based on temperature and pressure conditions for the by-product first steam flow or the second steam flow, wherein the biomass fuel source is different than the first energy source;

combining the by-product first steam flow and the second steam flow, wherein the steam flows are combined after the by-product first steam flow is processed through the heat recovery steam generator and the combined steam flow is at or below a maximum flow of the by-product first steam flow produced from the first energy source via the coupled heat recovery steam generator;

routing the combined steam flow through a steam turbine generator;

collecting water at a condenser;

reheating the water; and

using the reheated water for the processing of the first energy source and the biomass fuel source.

9. The method of claim 8 further comprising:

recirculating an output of the steam turbine generator for reheating; and

delivering the reheated steam to the steam turbine generator.

10. A system for generating electricity comprising:

a first component for producing, from a first energy source, electricity via a coupled generator, a first exhaust combusted gas, and a by-product first steam flow;

a second component for producing, separately from the processing of the first energy source and the first exhaust combusted gas, a second steam flow from a biomass fuel source at matched temperature and pressure conditions to the by-product first steam flow, wherein the biomass fuel source is different than the first energy source and the matched temperature and pressure conditions are adjustable based on temperature and pressure conditions for the by-product first steam flow or the second steam flow;

a heat recovery steam generator for processing the by-product first steam flow;

a steam line which combines the by-product first and second steam flows after the by-product first steam flow is processed in the heat recovery steam generator and the combined steam flow is at or below a maximum flow of the by-product first steam flow produced from the first energy source; and

a steam turbine generator which extracts energy from the combined steam flow.

11. The system of claim 10 further comprising a condenser.

12. The system of claim 10 wherein the first energy source is natural gas.

13. The system of claim 10 wherein the first energy source is fossil fuel.

14. The system of claim 10 wherein the first energy source is coal.

15. The system of claim 10 wherein the biomass fuel source is selected from one or more of the group of green tree chips, forest residues, yard clippings, wood chips, urban waste wood, construction and demolition waste wood, sugar cane fiber and agricultural waste.

16. The system of claim 10 wherein the steam turbine generator is a utility grade steam turbine generator.

17. The method of Claim 1, further comprising:

recirculating a first portion of an output of the steam turbine generator for reheating in a biomass boiler configured to process the biomass fuel source;

reheating the first portion of the output in the biomass boiler to generate a first reheated steam; and

delivering the first reheated steam to the steam turbine generator.

18. The method of Claim 17, further comprising:

recirculating a second output of the steam turbine generator for reheating in the coupled heat recovery steam generator of the turbine to generate a second reheated steam; and

delivering the second reheated steam to the steam turbine generator.

19. The method of claim 1, wherein the turbine is connected to the heat recovery steam generator.

20. The method of Claim 8, further comprising:

recirculating a first portion of the output of the steam turbine generator for reheating in the biomass boiler to generate a first reheated steam; and

delivering the first reheated steam to the steam turbine generator.

21. The method of Claim 20, further comprising:

recirculating a second output of the steam turbine generator for reheating in the coupled heat recovery steam generator of the turbine to generate a second reheated steam; and

delivering the second reheated steam to the steam turbine generator.

22. The system of Claim 10, further comprising a reheat steam line loop for reheating a first portion of an output in the biomass boiler to generate reheated steam, wherein the first portion of the output is received from a first section of the steam turbine generator and the reheated steam is delivered to a second section of the steam turbine generator.

23. The system of Claim 22, further comprising a second reheat steam line loop for reheating a second portion of the output in the first component to generate a second reheated steam, wherein the second reheated steam is delivered to the second section of the steam turbine generator.