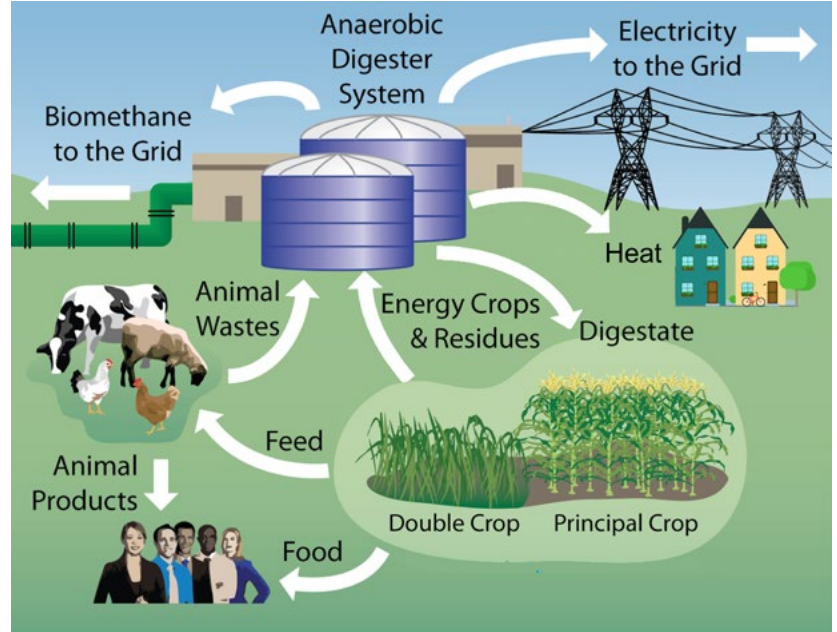




BIKE CASE STUDY #1

# Biogas done right model

The Biogasdone right® model (BDR) employs sequential cropping to produce both food and energy from agricultural biomass, primarily cellulosic materials. The crops are planted in period where the land would remain unused, between the main plantations. Crops and manure can be digested to produce biogas, which can then be upgraded to biomethane. Additionally, recycled digestate from the anaerobic digestion of agricultural and waste materials can be used as organic fertiliser, improving soil health, and sequestering atmospheric carbon. BDR was developed by the Italian Biogas Consortium (CIB).



# Biogas done right in figures

BDR IN FIGURES – The application of BDR can grant the availability of low-ILUC risk feedstocks by carrying on **sequential cropping**, which does not cause any land or production displacement.



**19 Million hectares** in Europe are available for sequential cropping



During the planting cycle, land is not utilised for 39% of time. This could be used for sequential cropping



Triticale, maize, sorghum are suitable for **sequential cropping**



**600 Farmers** in Italy produce **1.4 Gigawatt** of renewable electricity thanks to BDR

**GHG↓**

Biogas produced in farm can lead to **86%** of GHG savings

**CO<sub>2</sub>↓**

BDR applications can lead to near zero or negative emissions: **from 25 to -335 gco2 eq/kwh**

BDR ensures the sustainable production of biomethane, avoids soil erosion and nitrogen emissions, in addition it increases the availability and use of organic fertilizers. **BIKE will focus** on the conversion to liquid of biomethane to produce diesel or gasoline substitutes. These renewable fuels could be used in light-duty or heavy-duty vehicles or in the aviation sector.

# Serving EU goals

Application of BDR practices can help Europe to reach the ambitious objectives set in the Green Deal and in the New Common Agricultural Policy.



## Ensure a fair income to farmers

Farmers could diversify their income by selling renewable energy, digestate as fertilizer and benefit from future Carbon Farming Schemes



## Climate Change Action

BDR practices can improve carbon sequestration and drastically reduce livestock emissions



## Improved farming practices

The use of digestate could replace chemical fertilizers and improve the overall soil health

# References

[The potential for expanding sustainable biogas production and some possible impacts in specific countries. \(Biofpr\)](#)

[bike-biofuels.eu](http://bike-biofuels.eu)



Learn more on  
[www.consorziobiogas.it](http://www.consorziobiogas.it)