

## **Study visit (phone call) a farm in Iceland**

The carbon impact and sustainability discussion is way too one sided and negative for farmers according to Guðmundur a farmer in southern part of Iceland. Guðmundur took over his parents farm a few years ago. Back then it was a traditional sheep farm.

In the beginning he kept on farming the traditional way, like his parents had been doing for decades, but as time went by he grew ever more worried about the climate impacts of his farm so he started to make small changes to make the farm more sustainable.

In the beginning Guðmundur made small changes such as using less of imported fertilizer and tried to not rely on ready made food for the animals but he didn't feel like he was doing enough.

He made a complete map of all the carbon emissions on his farm and came up with a plan , he wanted to make his farm carbon neutral and if possible he does not want to rely on any imported products for his operations.

He has already started to extract methane gas from manure. That way he limits the methane emissions and gets fuel for his tractor and the family car. He has also started to grow better food for the sheep in order to not having to rely on imported food made from soya produced far away.

By doing those “small” changes Guðmundur says he has already cut his CO<sub>2</sub> emissions by one third. He is experimenting with a new way of creating fertilizer at home from nothing but water, air and electricity.

When he relies only on home made fertilizer Guðmundur says it will be easy to become completely climate neutral. He plans on growing lupine on a few hectares of land he has. The land currently consists of sand and the plan is to first use lupine to bind nitrogen and in the soil and a few years later plant trees in the nitrogen rich soil in order to bind even more carbon.

When all of this is done Guðmundur says he can offer carbon positive sheep grown only with materials made on his own farm.