

# Recovery and utilisation of nutrients for low impact fertiliser



## Fertiliser product fact sheet – Tailor made NPK pellets

### Tailor made fertiliser: NPK pellets from black water and food waste

Nutrient recovery from wastewater is still relatively expensive compared to conventional fossil dependent sources, and selling single recovered fertiliser products (such as struvite or ammonium sulphate) is challenging from an economic perspective. To increase market value, a high value product that can compete with existing products on the Swedish and EU internal market will be created at the Helsingborg demo site from digested black water and digested food waste. Struvite and ammonium sulphate are mixed in specific ratios with potassium chloride and dewatered sludge from the two anaerobic digesters to produce pelletised NPK organo-mineral fertilisers. The two sludges are certified as biofertilisers using Swedish national certification SPCR 120 and SPCR 178 that allow their use as fertilisers. The final product can be tailor made with specific NPK-ratios to fit different niches of fertiliser products. As such, the product can be made to fit the needs of both the domestic garden needs (higher profitability) and agricultural needs (promotes real circular economy). Another important step is the application of the EU End-of-waste criteria to recovered struvite and ammonium sulphate in order to guarantee safe recovery processes and increase economic value.

### Key facts

- EU End-of-waste process for struvite and ammonium sulphate
- Certified biofertiliser (SPCR 120 and SPCR 178) for the organic fraction of the NPK pellets
- Increased market value due to tailor made NPK-ratios

### NPK pellets in Run4Life

- Recovered fertilizer products originating from digested black water and digested food waste,
- Demosite: Helsingborg

*(see corresponding factsheets)*



*Organo-mineral pellets from digested sludge and recovered mineral fertiliser products. Image by NSVA.*

