



HELSINGIN YLIOPISTO



Eesti Maaülikool
Estonian University of Life Sciences



EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



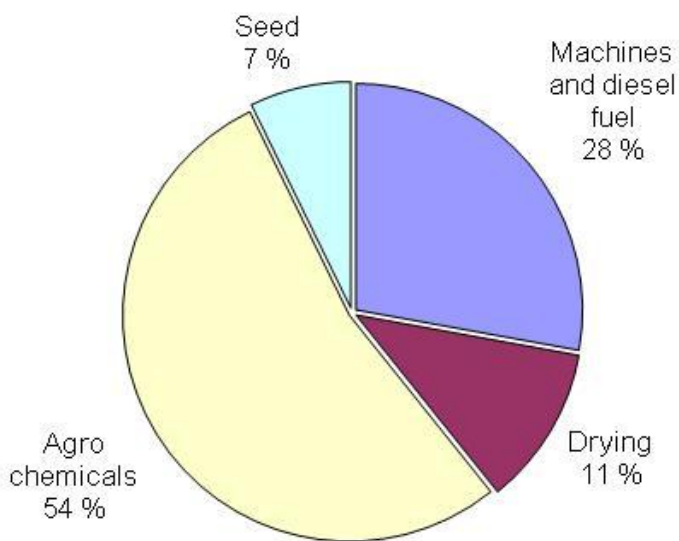
Energy Positive Farm - ENPOS

Energy saving strategies – field work

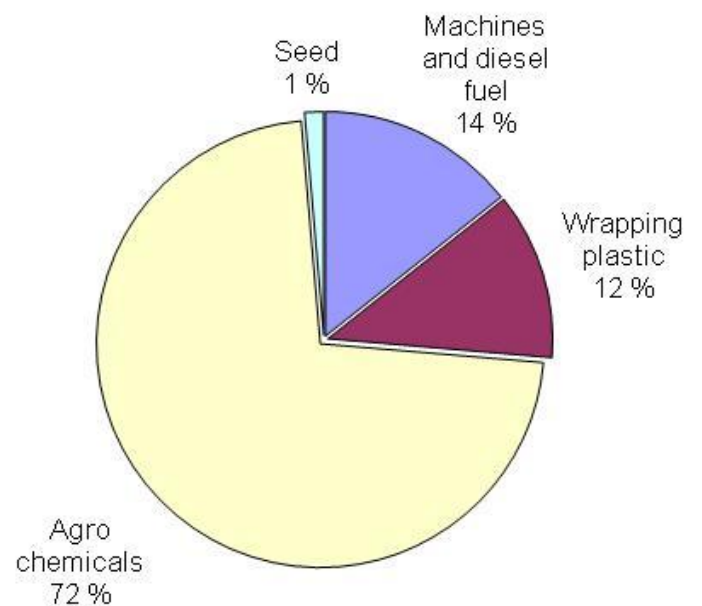
ENPOS Seminar - Energy use in plant production – Otepää 20 – 22 January 2010

Facts to keep in mind!

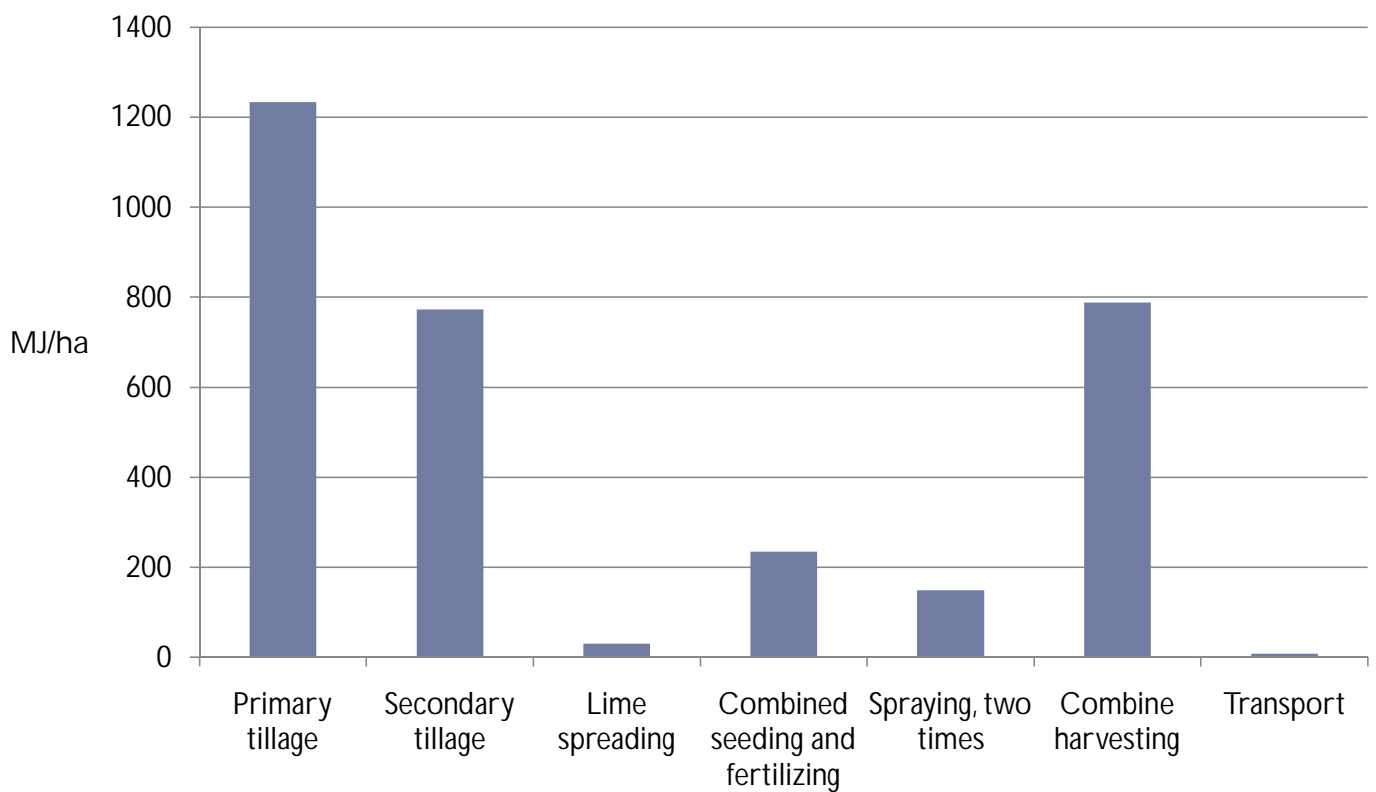
Barley, 11.6 GJ/ha total



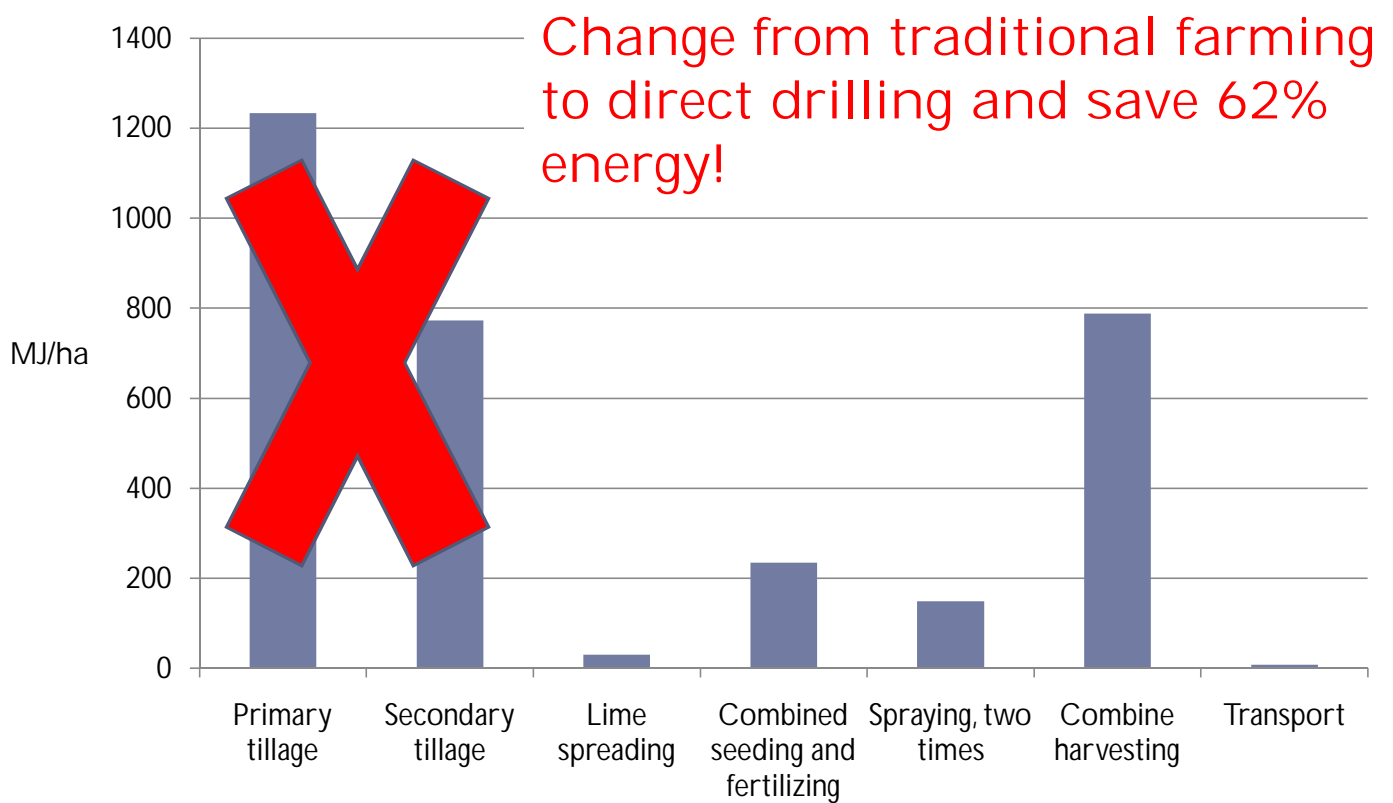
Lay for silage, 15.5 GJ/ha total



Energy consumption for field work in barley cultivation



Proposal to energy saving strategy



From traditional tillage to minimum or no-tillage

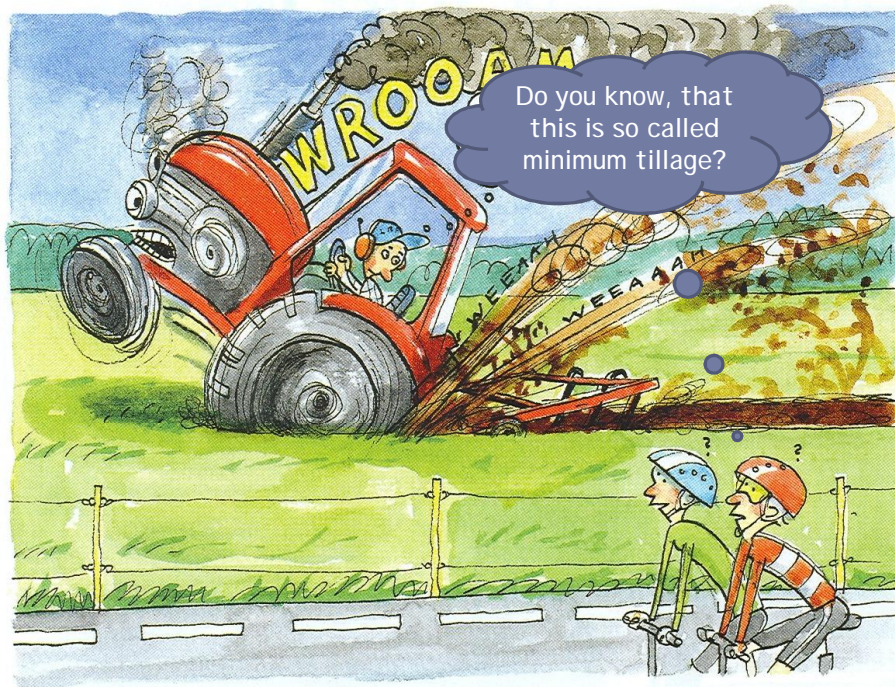
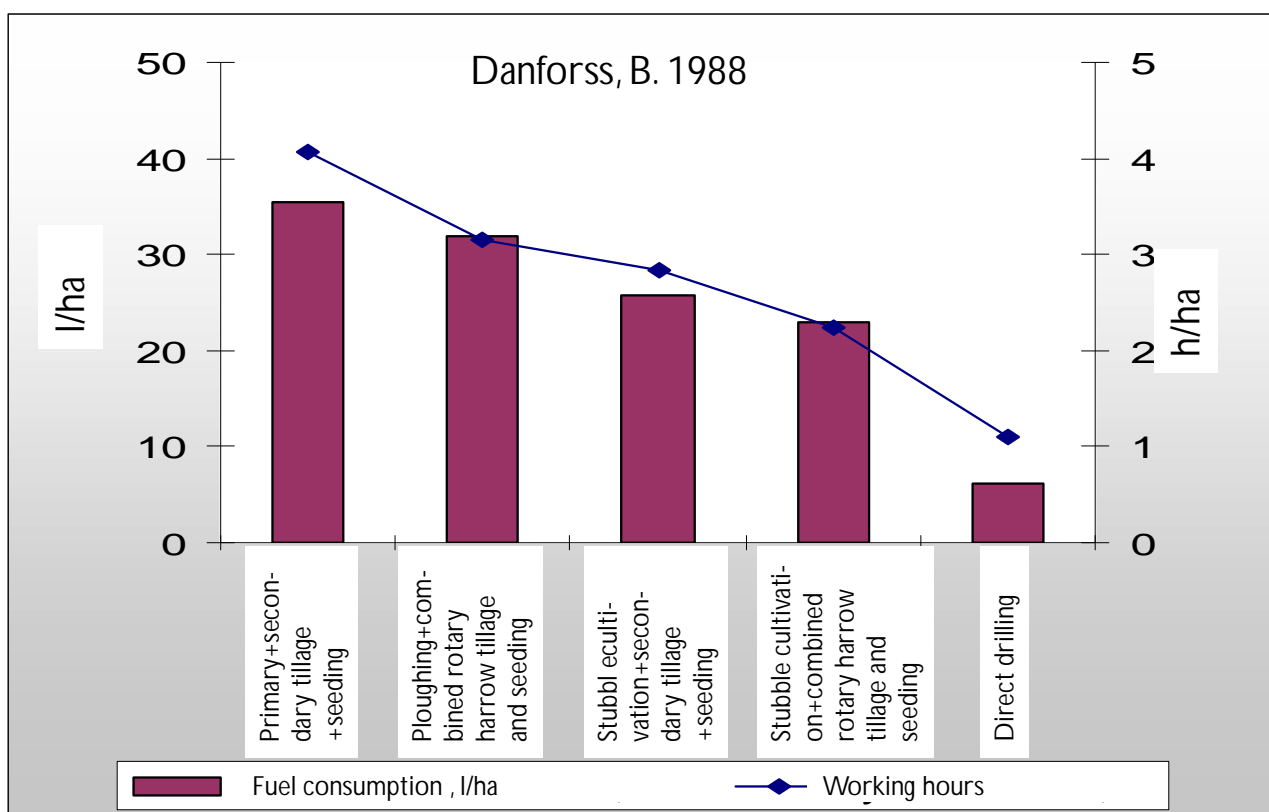


ILLUSTRATION: ANDERS SUNESON

sunesons synpunkt

► Det blir inte automatiskt reducerad jordbearbetning bara för att man har ställt undan plogen. Bearbetar man djupt med en kultivator eller kör många gånger kan det bli tvärt om, liksom en plog rätt använd mycket väl kan passa i ett reducerat system.

Fuel consumption and work requirement of different tillage and seeding combinations



Finnish experiences from direct drilling

- ▶ Over ten years experience
- ▶ Saves time
- ▶ Saves energy
- ▶ Can be used on all soil types
- ▶ Add seed rate 10% compared to traditional
- ▶ Soil adapts to zero tillage in a few years
- ▶ Some problems with weeds, but can be solved with correct plant protection strategy
- ▶ Yield level can drop in the first years but in a long yield level can even increase



Thank you for your patience
during these three days!