



## Designs for System Innovation

# Varkansen

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Varkenshouderij met neus voor dier, ondernemer, milieu en burger-consument.



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## Pork Opportunities

Three design directions for economically, ecologically and socially sustainable pig production and steps towards realisation

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This brochure is one of the results of the project Pork Opportunities, which has been executed by Wageningen UR Livestock Research as commissioned by the Ministry of Agriculture, Nature and Food Quality as part of the research programme 'Towards Sustainability in Production and Transition' (BO-07-009-014).



This brochure summarises the results of the project Pork Opportunities (Varkansen). You can download the extended version and other products from [www.varkansen.wur.nl](http://www.varkansen.wur.nl) (only available in Dutch).

Pork Opportunities demonstrates that an economically, ecologically and socially sustainable pork production system is obtainable. It shows three design directions for sustainable pork production and points out steps towards realisation.

Did the brochure get you interested? Are you also willing to work towards sustainable pig production? Please do let us know and contact us. Because innovation takes guts, support and each other.

### More information?

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## Designs for System Innovation

## Pork Opportunities in brief



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Is it possible to produce pork in a way that is good for People, Planet, Profit and Pigs? That was the central question in the project Pork Opportunities. Our answer is: yes, it is possible! Through major shifts in the way we think and act, the effects of pig production on animal welfare, the environment, the economy and work enjoyment can turn for the better. Three designs show how this could be done in practice. The given solutions are no blueprints, but need to be tailor-made for each specific situation. One thing is clear: it takes more than just a design to improve sustainability.

### To improve sustainability requires knowing everybody's needs

In our view, integrated economical, ecological and social sustainability means meeting the needs of the pig farmer, his pigs, the environment and the citizen-consumer. To operate more sustainably therefore requires to know all the participants' needs. As it turns out, a lot of needs run parallel to each other: the farmer's need for a sound work environment suits the pig's need for a clean place to live in. Reducing the emission of ammonia is not only important for the environment, but for all creatures that live and work in a sty.



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### To improve sustainability requires a different way of thinking

Does that mean we can just get started? Are all the solutions there to simply implement? Basically this is true, but on top of that a shift in our way of thinking is needed. During our quest for integrated sustainability, four shifts in thinking constantly reappeared. These shifts are needed to truly take big steps towards sustainability. The switch has to be flipped on the following matters:

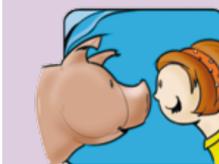
- 1 Allow the pig space to fulfil its own needs and benefit from that
- 2 Use the ability of pigs to recycle human food waste and produce value for the environment
- 3 Harvest minerals and energy, don't regard them as waste
- 4 Work on an active relationship with nature, citizen and consumer and connect the farm to its surroundings



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### To improve sustainability requires a joint re-design

During Pork Opportunities pig farmers, pig housing system suppliers, local administrators and researchers jointly took up the challenge to re-design the pig production system. They translated the needs of the main participants of the pig production system to goals and solutions for integrated economically, ecologically and socially sustainable pig production. But what does sustainability mean, what does it entail for pig production? And what might a sustainable pig farm look like? All the results are compiled in the extended brochure. The designs demonstrate that there are ways to realise the goals, without failing any of the participants' needs. Three designs show possibilities with regard to housing, feed, energy, manure, minerals and the farm's relationship with its environment for a variety of farms. Solutions that benefit the animal, the pig farmer, the environment and the farm's surroundings, all at the same time. Some solutions have already proven themselves in practice. Others are a challenge for further development by innovative entrepreneurs and researchers.



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### To improve sustainability requires action

By going down the road we pointed out in the design directions, an economically, ecologically and socially sound pig production system should be obtainable. The next hurdle is to put the plans into action. The first steps have already been taken. Pig farmers, who took part in the re-design process, have accepted the challenge. Stakeholders in pig production are prompted to support them. Because improving sustainability takes guts, support and each other. That's how you seize *Pork Opportunities*: opportunities for improving the sustainability of pig production.



To improve sustainability requires...

knowing everybody's needs, a different way of thinking, a joint re-design and action

