

## Technical Visit

**The European Rhine-Neckar Metropolitan Area –  
an European agricultural model region**



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Germany and the Rhine-Neckar  
Metropolitan Area in the southwest



Illustration: City of Mannheim  
The Rhine-Neckar Metropolitan Area

### Germany's modern and sustainable agriculture

Germany is one of the largest agricultural producers in the European Union. Compared with other European countries, Germany belongs to one of the biggest exporters in EU. Farming land (16,8 Mill. hectare) accounts nearly 50 % of Germanys whole land area and approximately 900.000 ha are cultivated in adherence with guidelines of eco-associations. In 95 % of approx. 370.000 farms controlled cultivation with sustainable and ecological methods are applied. Due to the ideal moderate climate conditions, with four distinct seasons, Germany has a rich flora and fauna.

With the support of the government, the agriculture in Germany has been highly developed, which is presented in several aspects, like high productivity, agricultural self-sufficiency rate, high-tech agriculture, high degree of mechanization and high farmers` income. Moreover, Germany also coordinates the rural development along with industrialization. Thanks to the attention on sustainability and environmental protection, Germany has kept its natural beauty of the countryside.



## **The Rhine-Neckar Metropolitan Area – an agricultural model region**

The Rhine-Neckar Metropolitan Area (RNM), situated in Germany's south west, near the International Airport Frankfurt on Main, has approximately 2,4 million inhabitants in an area of more than 5.600 sqkm. The RNM, one of Europe's most important economic regions with its economic and cultural capitals Heidelberg, Mannheim and Ludwigshafen, is the location of various international enterprises as well as famous universities with international reputation like the Universities of Heidelberg and Mannheim. The Rhine-Neckar Metropolitan Area has also extended agricultural areas for saving the nutrition of the citizens and the supply of energy plants with biomass.

Environmental protection has many aspects in the agriculture of the Rhine-Neckar region: the protection of climate, soil, water and the maintenance of biological diversity. Modern production methods and high-tech machines help to achieve high yields on the long term on limited land areas. High efficiency and economic success are preconditions for ensuring the farmers existence and the economic power of the whole region. So the agriculture in the RNM gives an important contribute for environmental and climate protection and biological diversity. Due to a development where fossil fuels, synthetic materials and chemical products are replaced by plants, there arises the question whether agriculture can manage the increasing demand. This concerns the range of bio-economy.

In the RNM most of the farmers cultivate plants according to the guidelines of controlled farming and of organic controlled farming. Very important is the minimization of pesticide application. The growers, often organized in cooperation, supply the region with an abundance of products in highest quality. Organic farm products are offered on local markets, specialized grocery stores as well as in restaurants and catering facilities. The RNM is a famous European wine-growing area with many wineries applying organic cultivation. Due to the highest quality, regional wines have an international reputation.

Energy providers and other enterprises operating various energy plants using renewable biomass, in order to supply the region with save and clean energy via electricity grid and local heat resp. district heating grids.

### **Following cultivations are typical for the region:**

- Winery (many famous grape families are cultivated)
- Cereals (wheat, rye, oat, spelt)
- Fruits (apples, pears, cherries, plums etc.)
- Vegetables (potatoes, sugar beets, cabbage etc.)
- Garden products
- Dairy farming (milk, cheese and other dairy products)
- Maize and rape (food products and energy crop plants)
- Forestry (natural spaces and supplier with wood fuel)

## **Topic overview for the programs:**

### **Agriculture: policy, sustainable cultivation, production, commercialization**

1. Agricultural policy in the European Union and Germany
2. Sustainable land utilization for agriculture, nature protection
3. Organic farming – cultivation, production, marketing, distribution and sales channels for agricultural products
4. Organic products directly from the farm to organic grocery stores
5. Ecological wine cultivation in the region: production of high quality wine with international reputation
6. “Joint Agriculture”: local people finance an organic farm and the harvest of the farm will be shared
7. The use of organic products in food service industry (restaurants, catering)
8. Integration of IT-systems in agriculture
9. Development of farming and absorption of farms by the next generation

### **Agriculture: Generation and Distribution of bioenergy**

10. Generation and distribution of sustainable bioenergy, using energy crop plants like maize, rape etc. as well as wood fuel
11. Presentation of biogas plants and wood-fired co-generation plants (CHP)
12. Perspectives of Bio-Economy
13. Visit of energy autarkic community

### **Presentations and lectures given by experienced experts.**

**Visits, guidances:**

Accommodation at a Hotel in Heidelberg

with passive house standard

Visit of an organic farm

Agriculture and marketing cooperatives

Winery, organic cultivation, wine degustation

Visit of a dairy farmer, presentation of ecological dairy products

Visit of local markets

Presentation of a biogas plant or a wood-fired heating plant

Visit of an energy cooperative

Heidelberg city-tour, visit of the castle with guidance

Visit of an organic food market

Visit of Heidelberg's "Old Marketplace" (food products and shopping center)



## Suggested exemplary programs:

### Program A

#### Morning (9.00 - 12.00 a.m.)

Transfer by bus

1. Lecture: methods of organic farming and experiences, discussion
2. Lecture: commercialization of organic agricultural products - discussion

#### Noon: Lunch

#### Afternoon (14.00 - 16.00 p.m.)

Transfer by bus

3. Visit of an organic farm - presentation of management, operation, machines and products - discussion with the farmer

#### Evening: Dinner

#### Evening (19.00 - 21.00 p.m.)

Transfer by bus

4. Visit of an organic controlled winery - degustation of various organic controlled wines from the region



## Program B

### Morning (10.00 - 12.00 a.m.)

Transfer by bus

1. Lecture: "Chances for the utilization of biomass to realize the energy turnaround - limits of bio-economy, discussion"

### Noon: Lunch

### Afternoon (14.00 - 16.00 p.m.)

Transfer by bus

2. Visit and presentation of a wood-fired heating plant (co-generation) powering a whole urban district

### Afternoon (16.00 - 18.00 p.m.)

Transfer by bus

3. Shopping in Heidelberg, one of the most important shopping towns of the region

### Evening: Dinner



Image: Biotec Heidelberg



Image: Envitec



Image: Biotec Heidelberg

## Program C

### Morning (9.00 - 12.00 a.m.)

Transfer by bus

1. Lecture: sustainable land utilization for agriculture, discussion
2. Lecture: generation and distribution of green energy, using energy crop plants - discussion



Image: Envitec

### Noon: Lunch

### Afternoon (14.00 - 18.00 p.m.)

Transfer by bus

3. Visit and presentation of a biomass plant
- Transfer by bus
4. Visit of the Heidelberg Castle, with guidance
  5. Heidelberg city-tour, with guidance



### Evening: Dinner

If rooms are available, our guests are accommodated at a modern, comfortable hotel in Heidelberg with passive house standard.

Free combination of programs, visits and guidance is possible.

With Econa Tours GmbH, we organize our full day technical visits with Japanese speaking interpreter and transportation as well as meals and other services.



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