

An aerial photograph of a vast open-pit coal mine. The mine's terraced slopes are visible, showing different layers of earth and coal. A long conveyor belt system runs across the mine, transporting coal. In the background, a line of wind turbines is visible against a clear sky. The overall scene depicts a large-scale industrial mining operation.

TAGEBAU GARZWEIFER

BROWN COAL VS HOMELAND

OVERVIEW

1. Where is Garzweiler?
2. Why is Garzweiler so significant?
3. What is the meaning for Economy and Industry?
4. Historical Background
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6. Garzweiler I & II
7. Impact on Villages
8. Technology Used in Garzweiler
9. Environmental Consequences and Resettlement
10. Protest and Politics
11. Future of Garzweiler
12. Conclusion



WHERE IS GARZWEIFER?

- Located in North Rhine–Westphalia, Germany
- Near Cologne, Düsseldorf, and Mönchengladbach
- Large open-pit lignite (brown coal) mine
- Visible from above as a massive scar on the landscape



WHY IS GARZWEIFER SO SIGNIFICANT

- Key site for Germany's energy production
- Supplies brown coal (lignite) to power plants
- Provides electricity to households and industries



WHAT IS THE MEANING FOR ECONOMY AND INDUSTRIES?

- Thousands of jobs in mining, transport, and energy sectors
- Major driver of regional economic growth
- Growing protests against coal due to climate concerns
- Transition to renewable energy planned → both opportunity and challenge



HISTORICAL BACKGROUND

- Brown coal mining in the Rhineland since the 19th century
- Large-scale open-pit mining began in the 1950s
- Symbol of progress; over 1/3 of Germany's electricity from brown coal
- Energy supply and jobs in the triangle Cologne-Aachen-Mönchengladbach





HISTORICAL BACKGROUND

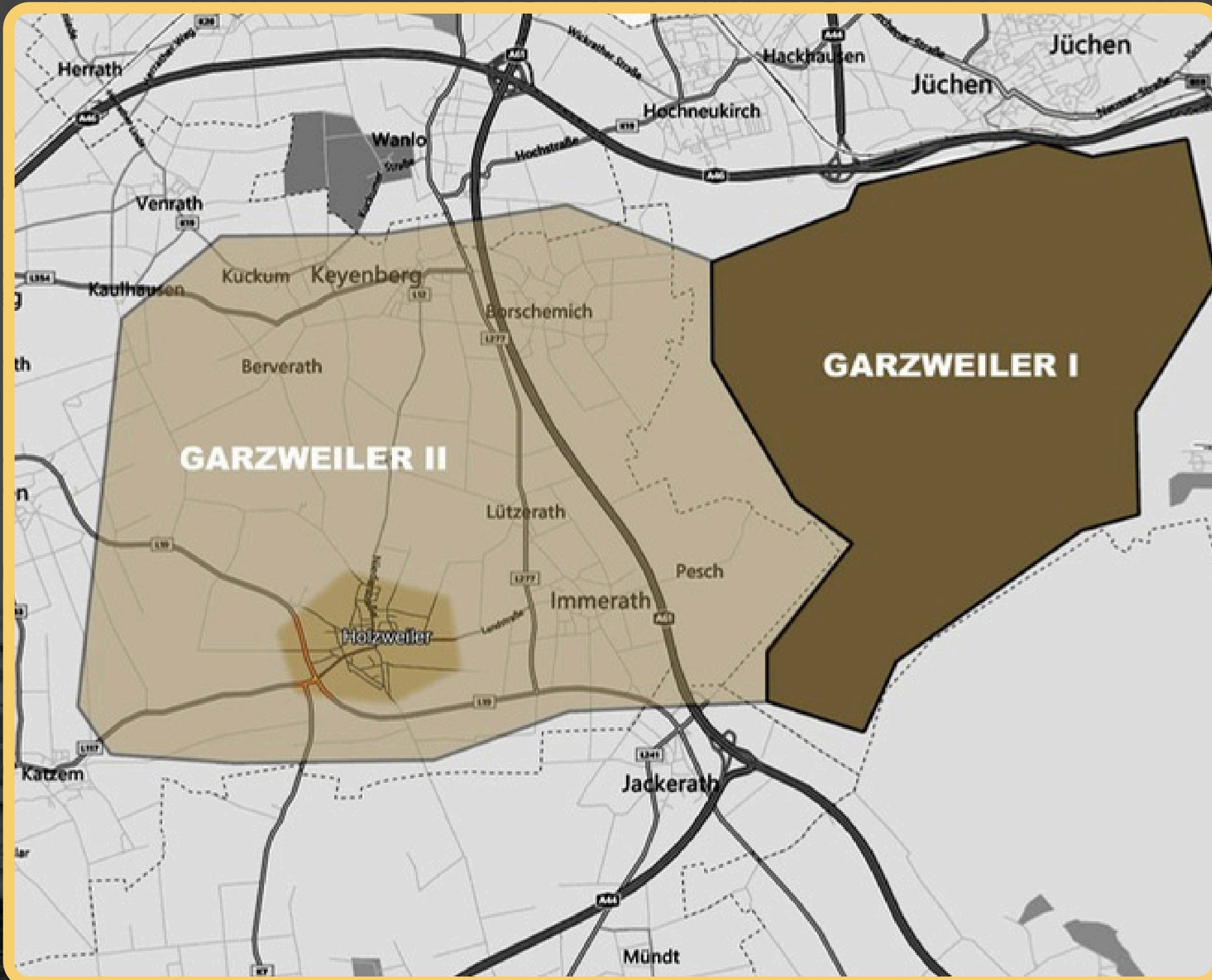
- Little protest against resettlement of entire villages
- Old houses without bathrooms or heating considered of little value
- Compensation allowed residents to build modern houses
- Many residents worked for Rheinbraun



KASTER AS AN EXAMPLE

- Medieval town with city gates and baroque buildings
- Demolition almost approved in 1954, but prevented by mayor, conservator, and regional president
- Historic town saved - a rare example

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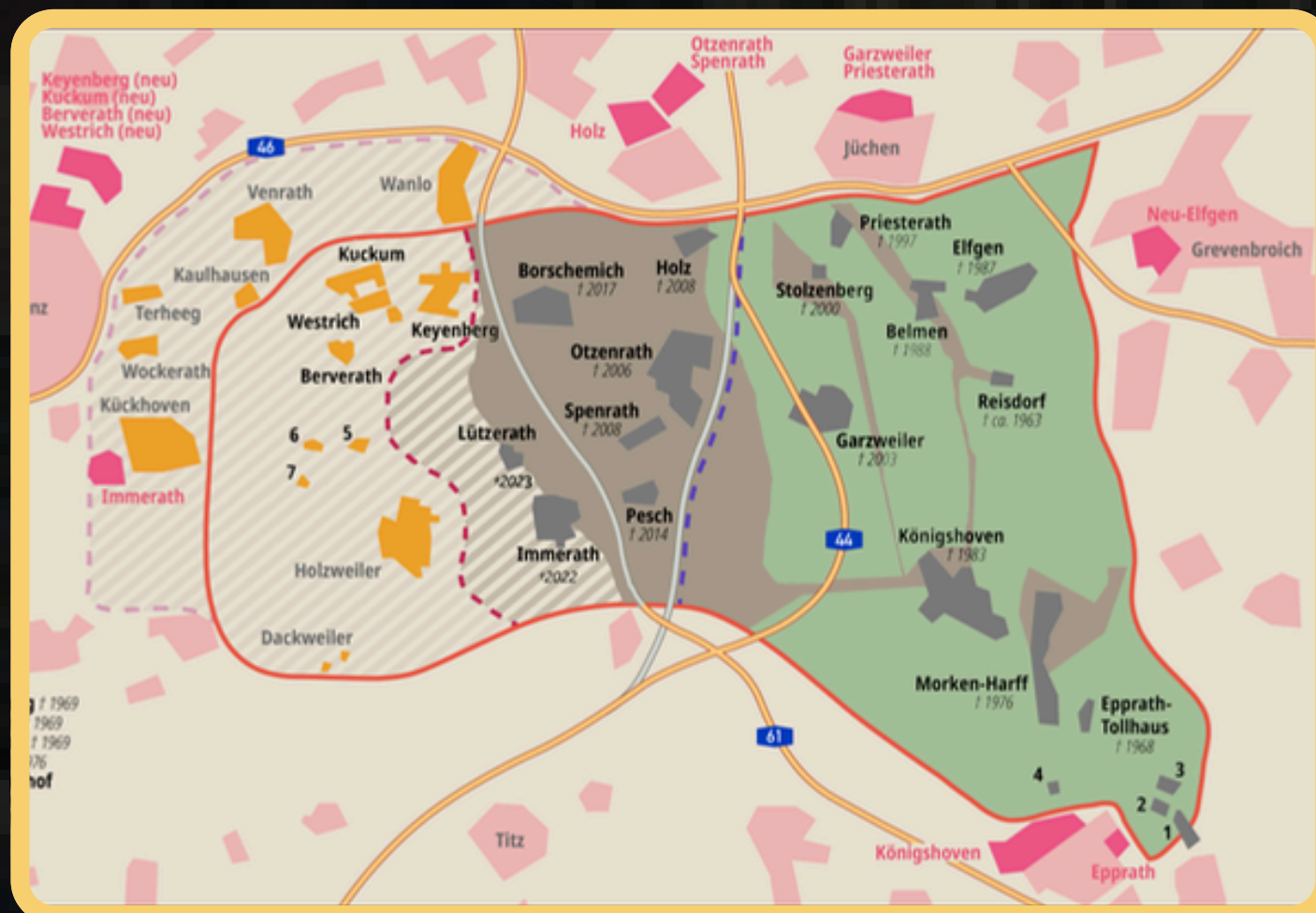


GARZWEILER I & II

- Garzweiler I: opened 1983
- Garzweiler II: approved in 2006, mining started
- Total area >100 km², coal reserves ~ 1.6 billion tons, annual production up to 45 million tons
- Coal seams up to 210 meters
- deep

IMPACT ON VILLAGES

- Over 40 villages disappeared (e.g., Immerath, Otzenrath)
- New settlements: modern and practical, but without original village structures
- Loss of homeland and emotional burden for residents



Interviewee: No, no, no. It really wasn't easy for me.

TECHNOLOGY USED IN IN THE GARZWEILER

- Huge machines are used
- Bucket-wheel excavators, conveyor belts, stackers
- Coal goes directly by conveyor belts to power plants
- After mining: area planned to become "Lake Garzweiler"
- Depth: 165 m
- Size: 2,200 hectares
- Shoreline: about 20 km





ENVIRONMENTAL CONSEQUENCES

- Forests, fields, and animal habitats destroyed
- Groundwater is lowered → springs and soils dry out
- Burning coal = high CO₂ emissions, bad for climate
- New lake and recreation areas planned, but recovery takes decades



RESETTLEMENT

- About 7,600 people had to move
- 11 villages destroyed
- Lützerath demolished
- 5 villages saved in 2021:

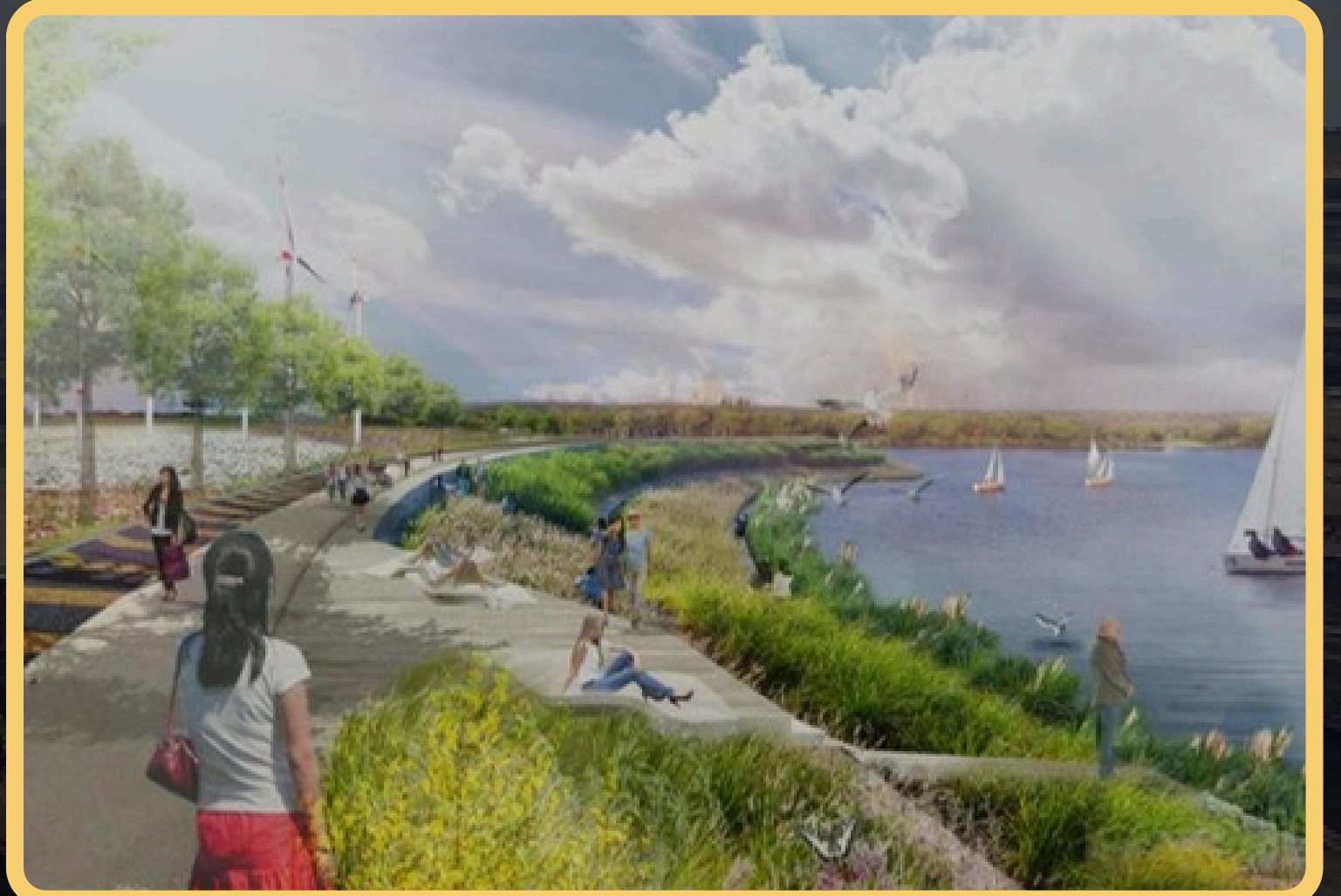
PROTEST AND POLITICS

- Many protests by environmental groups and local citizens such as "„Ende- Gelände or " Friday for Future"
- Lützerath became a symbol of climate protests
- Activists lived in houses and blocked machines
- Ongoing debates: does coal mining fit
- Germany's climate goals?



FUTURE OF GARZWEILER

- Coal phase-out accelerated to 2030, cutting mining area in half
- Many villages and farms preserved, avoiding further resettlement
- After mining ends, creation of Garzweiler Lake with natural shorelines
- Lake and landscape restoration for recreation and biodiversity
- Region to develop renewable energy sites – solar, wind, and innovation hubs
- Focus on sustainable, climate-friendly economic





CONCLUSION

- Garzweiler has greatly transformed the region
- Once a cultural landscape with villages, farms, and fields
- Now dominated by industry and open-pit mining
- Huge machines shape and control the area
- The once familiar place has turned into something completely different

THANK YOU

