



# Physical Geography of Europe: The Peninsula of Peninsulas

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# Section 1: Landforms and Resources

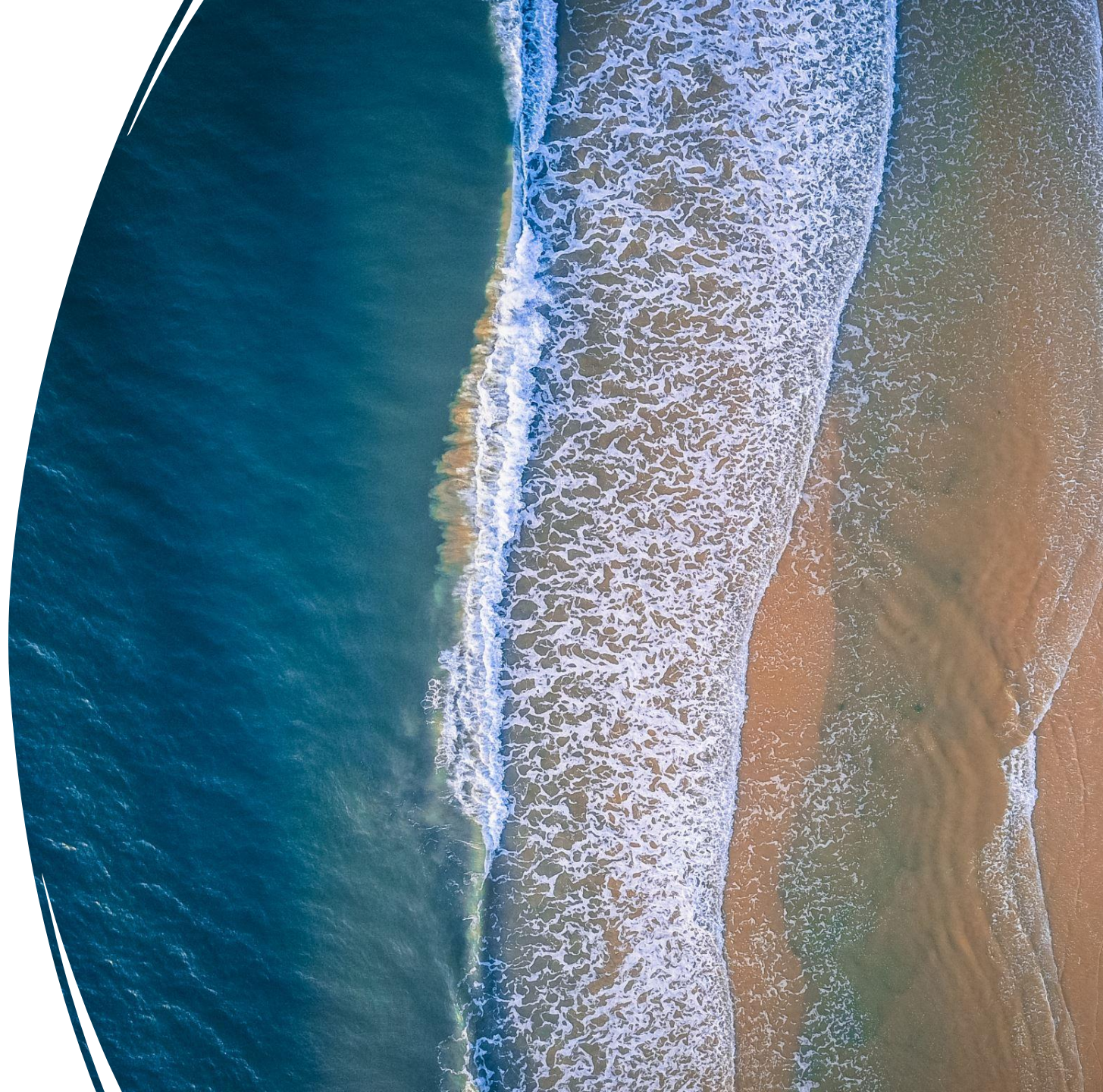
- Europe is composed of many peninsulas and islands
- Europe's landforms also include large plains and mountain ranges



# Peninsulas and Islands

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- Always Near the Water
  - Europe is a large peninsula of Asia
    - Also has its own smaller peninsulas: a "peninsula of peninsulas"
    - Most places are within 100 miles of the ocean or a sea



# Northern peninsulas



# Peninsulas and Islands

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- Northern Peninsulas
  - The Scandinavian Peninsula includes Norway and Sweden
    - Bounded by Norwegian, North, and Baltic Seas
  - Ice Age glaciers remove topsoil; leave thin, rocky soil
  - Glaciers create fjords in Norway
    - Steep U-shaped valleys connected to sea, filled with seawater
    - Provide harbors for fishing boats
  - Jutland Peninsula forms large part of Denmark, small part of Germany
    - Gentle, rolling hills and swampy low areas

# Peninsulas and Islands

- Southern Peninsulas
  - Iberian Peninsula: home to Spain, Portugal
  - Italian Peninsula includes Italy, extends into Mediterranean Sea
    - Boot-shaped, with 4,700 miles of coastline
  - Balkan Peninsula bordered by Adriatic, Mediterranean, Aegean seas
- Islands
  - Larger: Great Britain, Ireland, Iceland, Greenland in North Atlantic
  - Smaller: Corsica, Sardinia, Sicily, Crete in Mediterranean



# Mountains and Uplands

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- Mountain Chains
  - The Alps is Europe's most famous mountain chain
    - Crosses France, Italy, Germany, Switzerland, Austria, Balkans
    - Cuts Italy off from rest of Europe
  - Pyrenees block movement from France to Spain and Portugal
  - Apennine Mountains divide Italian Peninsula between east, west
  - Balkan Mountains block off peninsula, separate ethnic groups



# Mountains and Uplands

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- UPLANDS
- Uplands - hills or low mountains; may have mesas, high plateaus
  - Some are eroded remains of mountain ranges
- Uplands include Scandinavian Kjolen Mountains, Scottish Highlands
  - Also Brittany in France and the Meseta plateau in Spain
- Some uplands border mountainous areas
  - Central Uplands of Germany at base of Alps
  - Massif Central uplands in France





# Rivers: Europe's Links



# Moving People, Goods and Ideas

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- Network of rivers bring people, goods together
  - Allows goods inland from coastal harbors, aids economic growth
- Two major, castle-lined rivers have historically acted as highways
  - Rhine flows north 820 miles from interior to North Sea
  - Danube flows east 1,771 miles, through 9 countries, to Black Sea
- These and many other rivers connect Europeans
  - Encourage trade and travel



# Fertile Plains: Europe's Bounty

- The Northern European Plain
  - One of the most fertile agricultural regions in world
  - Curves across France, Belgium, Netherlands, Denmark, Germany, Poland
    - Flat agricultural land produces vast quantities of food
  - Flatness also has given invaders an open route into Europe
  - Other, smaller, fertile farming plains:
    - Sweden, Hungary, northern Italy's Lombardy

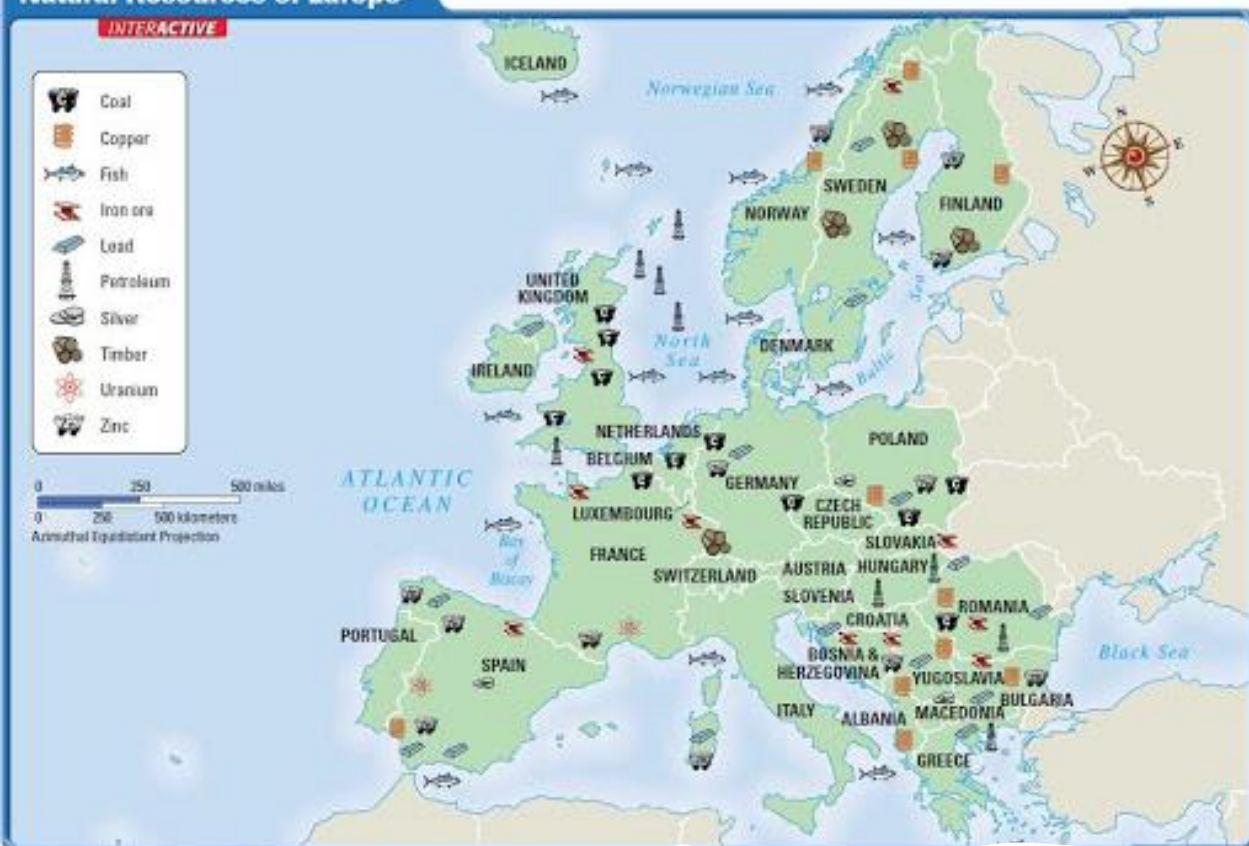


An aerial photograph of Paris, France, taken during the golden hour. The Eiffel Tower is prominent on the left side of the frame. The city's dense urban landscape, including numerous buildings and green spaces, is visible. The sky is filled with soft, golden light and scattered clouds. The text "Resources Shape Europe's Economy" is overlaid in a white, cursive font across the center of the image.

# Resources Shape Europe's Economy

# Natural Resources of Europe

INTERACTIVE



[dreamstime.com](https://www.dreamstime.com)

ID 153572049 © Gunold

## Fueling Industrialization

- Coal and iron ore are needed to create steel for industrialization
  - Found in Belgium, Netherlands, France, Germany, Poland
- Major industrialized regions:
  - Ruhr Valley, Germany; parts of United Kingdom

# Energy and Agricultural Land

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- Energy
  - Oil, natural gas found in North Sea in 1959; offshore rigs in 1970s
    - Petroleum supplied by Norway, Netherlands, Britain
- Agricultural Land
  - 33% of Europe is suitable for agriculture; world average only 11%



# Resources Shape Life

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- Affecting all parts of life
  - Resources affect food, jobs, houses, even culture
    - For example, folk tales set in deep, dark forests of Old Europe
  - Distribution of resources creates regional differences
    - For fuel, Irish burn peat - partially decayed plant matter from bogs
    - Polish miners have worked coal mines for generations





# Section 2: Climate and Vegetation

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Much of Europe has relatively mild climate because of ocean currents and warm winds.  
Eastern Europe has a harsher climate because it is farther from the Atlantic Ocean

# Westerly Winds Warm Europe

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- A Mild Climate for a Northern Latitude
  - Marine west coast climate: warm summer, cool winters
    - Spain, France, Poland, British Isles, coastal Scandinavia
  - North Atlantic Drift - warm-water tropical current flows by west coast
    - Prevailing westerlies carry current's warmth, moisture inland
  - Alps' high elevation creates colder climate, deep winter snows
- Forests to Farms
  - Original mixed forests cleared for farming
    - Grow grains, sugar beets, livestock feed, potatoes





# Harsher Conditions Inland

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- Not Reached by Westerly Winds
  - Humid continental climate: cold, snowy winters; warm or hot summers
    - Sweden, Finland, Romania; eastern Poland, Slovakia, Hungary
  - Adequate rainfall for agriculture
  - Heavy deforestation; surviving trees are mostly coniferous
  - Broad, fertile plains were once covered with grasses
    - Today: wheat, rye, barley, potatoes, sugar beets grow

# The Sunny Mediterranean

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- An Appealingly Mild Climate
  - Mediterranean climate: hot, dry summers; mild, wet winters
  - Italy, Greece and southern Spain, France
  - mountains block cold north winds
- Special Winds
  - Mediterranean coast of France is not protected by mountains
    - mistral—a cold, dry winter wind from north
  - Sirocco—hot North African wind carries sea moisture or desert dust



# The Sunny Mediterranean

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- The Climate Attracts Tourists
  - Vegetation is evergreen shrubs, short trees
    - Major crops: citrus fruits, olives, grapes
- Sunny beaches attract tourists



# Land of the Midnight Sun

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- Cold, Dark Winters
  - Tundra climate in far northern Scandinavia, along Arctic Circle
    - Permafrost with no trees, only mosses, lichens
  - South of tundra is subarctic climate: cool with cold, harsh winters
    - Little growth except stunted trees
  - Region's sunlight varies sharply: long winter nights, summer days
    - Area north of Arctic Circle the Land of the Midnight Sun
    - Some winter days have no sun, some summer days have no night






## Section 3: Human Environment Interaction

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- The Dutch and the Venetians altered lands to fit their needs by constructing polders and canals.
- Uncontrolled logging and acid rain destroy forests.



# Polders: Land from the Sea

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- Creating Holland
  - "God created the world, but the Dutch created Holland"
  - to hold growing population, the Dutch reclaimed land from the sea
  - 40% of the Netherlands was once under water
  - dikes—earthen banks that hold back the sea
  - a polder—land reclaimed by diking and draining

# Polders: Land from the Sea

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- Seaworks
  - Seaworks—structures like dikes that control sea's destructive force
    - terpen—high earthen platforms that provide safeguard during floods
  - In 1400s windmills were used to power pumps that drained land
    - today the pumps are powered by electricity



# Polders: Land from the Sea

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- Transforming the Sea
  - Zuider Zee—arm of North sea the Dutch turned into a fresh-water lake
  - Built dikes across entrance in early 1900s
    - saltwater eventually replaced by fresh water
  - Project added hundreds of square miles of land to the Netherlands
  - lake is now called IJsselmeer







# Waterways for Commerce: Venice's Canals

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- An Island City Grows
  - City of Venice is made up of 120 islands
    - two of the largest are San Marco and Rialto
  - People, goods are moved by boat over 150 canals
  - City forms when people escaping invaders settled on lagoon islands
    - location at north end of Adriatic makes it a good trading port

# Waterways for Commerce: Venice's Canals

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- Building on the Islands
  - Builders sunk wooden pilings into swampy land to support buildings
    - oak forests in northern Italy and Slovenia were leveled for pilings
    - weight of buildings is compressing ground, so Venice is slowly sinking
  - Rising sea levels and removal of groundwater also cause sinking



# Waterways for Commerce: Venice's Canals

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- Problems Today
  - Severe water pollution
    - industrial waste, sewage, saltwater eat away foundations
    - erosion lets saltwater in, creates floods such as in 1966
  - Agricultural runoff promotes "killer algae" growth
    - algae grow rapidly, die, decay; this uses up oxygen, so fish die
    - dead fish attract insects and create stench in warm weather



# A Centuries-Old Problem: Deforestation

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- The Demand for Wood
  - Huge areas of Europe fall prey to deforestation
  - Wood used for fuel, building material for ships, houses
    - industry needed wood charcoal for blast furnaces
    - eventually coal replaces wood, but damage to forests is done



# A Centuries- Old Problem: Deforestation

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- Acid Rain Strips Forests
  - In 1960s Germans notice Black Forest trees are discolored, dying
    - cause is acid rain
  - Factories produce sulfur dioxide, nitrogen oxide emissions
    - combine with water vapor, create acid rain or snow
    - winds carry emissions to other areas, affecting one-fourth of forests
  - Scandinavia suffers heavily due to prevailing winds
    - blowing emissions from the industrial region of Germany

