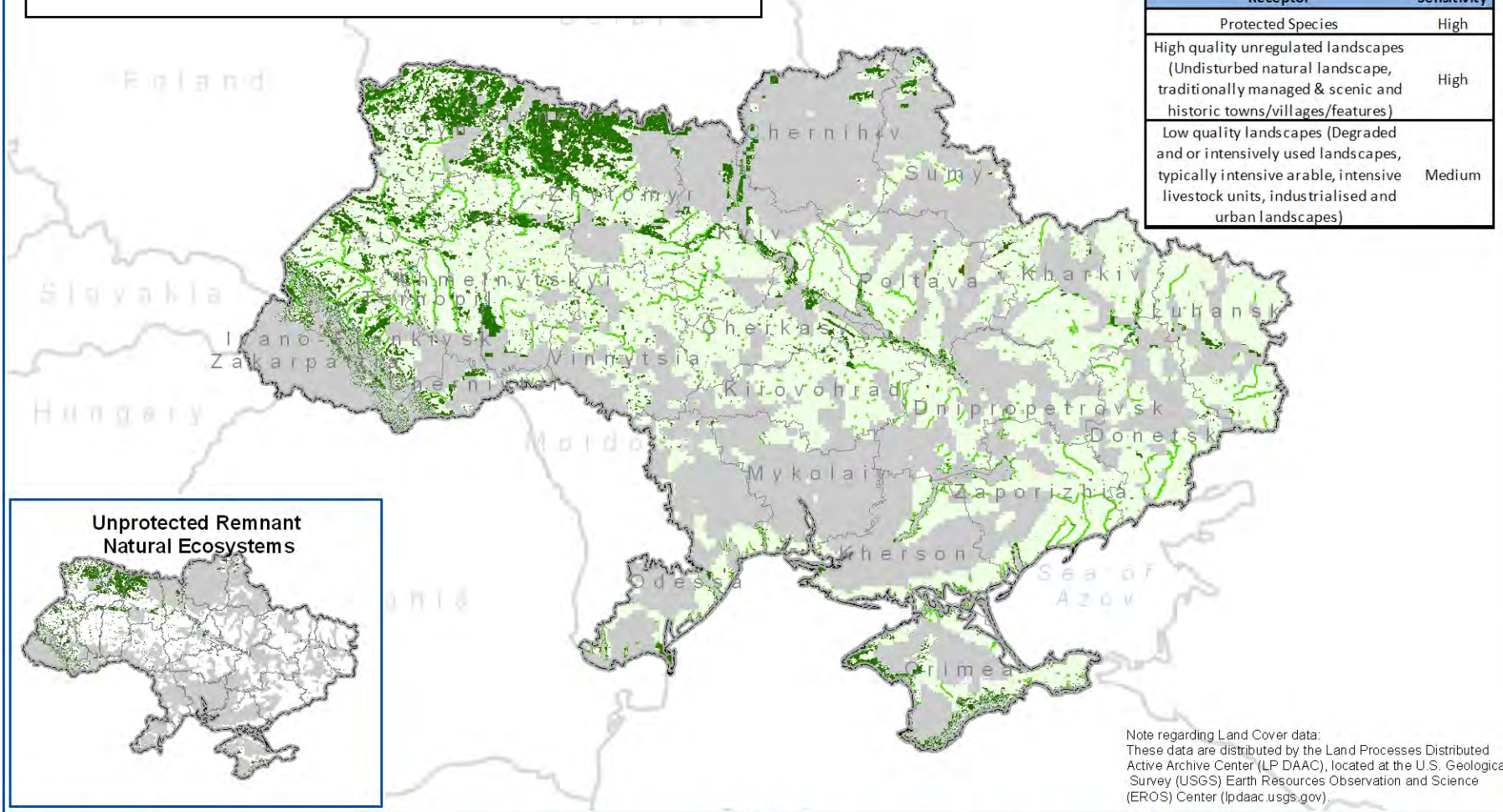
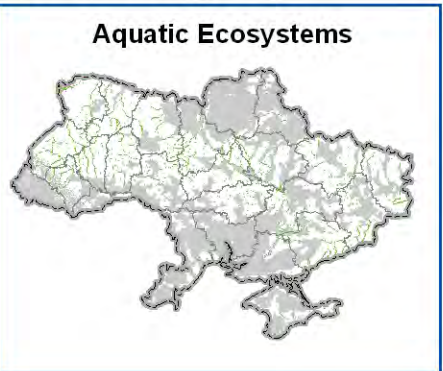
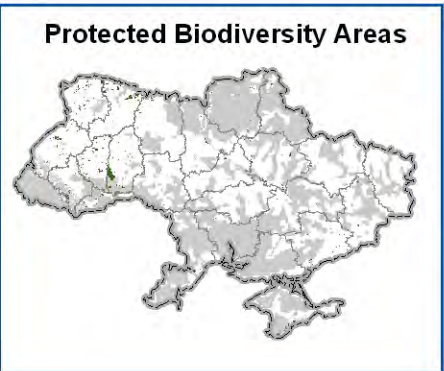
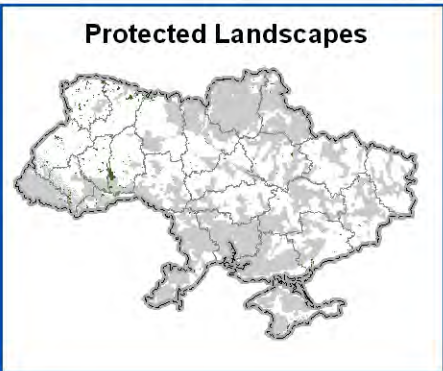
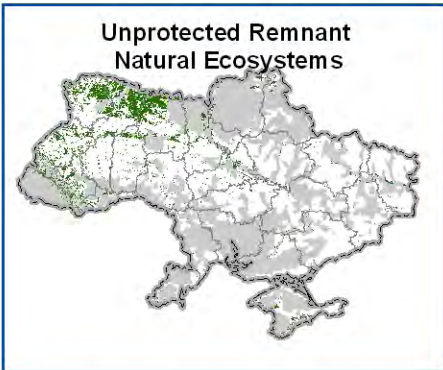


**Figure LB1 Spatial constraints for Landscape and Biodiversity under the on-shore wind renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	High
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



Note regarding Land Cover data:  
These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)

**Landscape and Biodiversity Sensitivity to Wind Development**

**Legend**  
 ■ Technical Exclusions  
**Sensitivity**  
 ■ Low  
 ■ Medium  
 ■ High

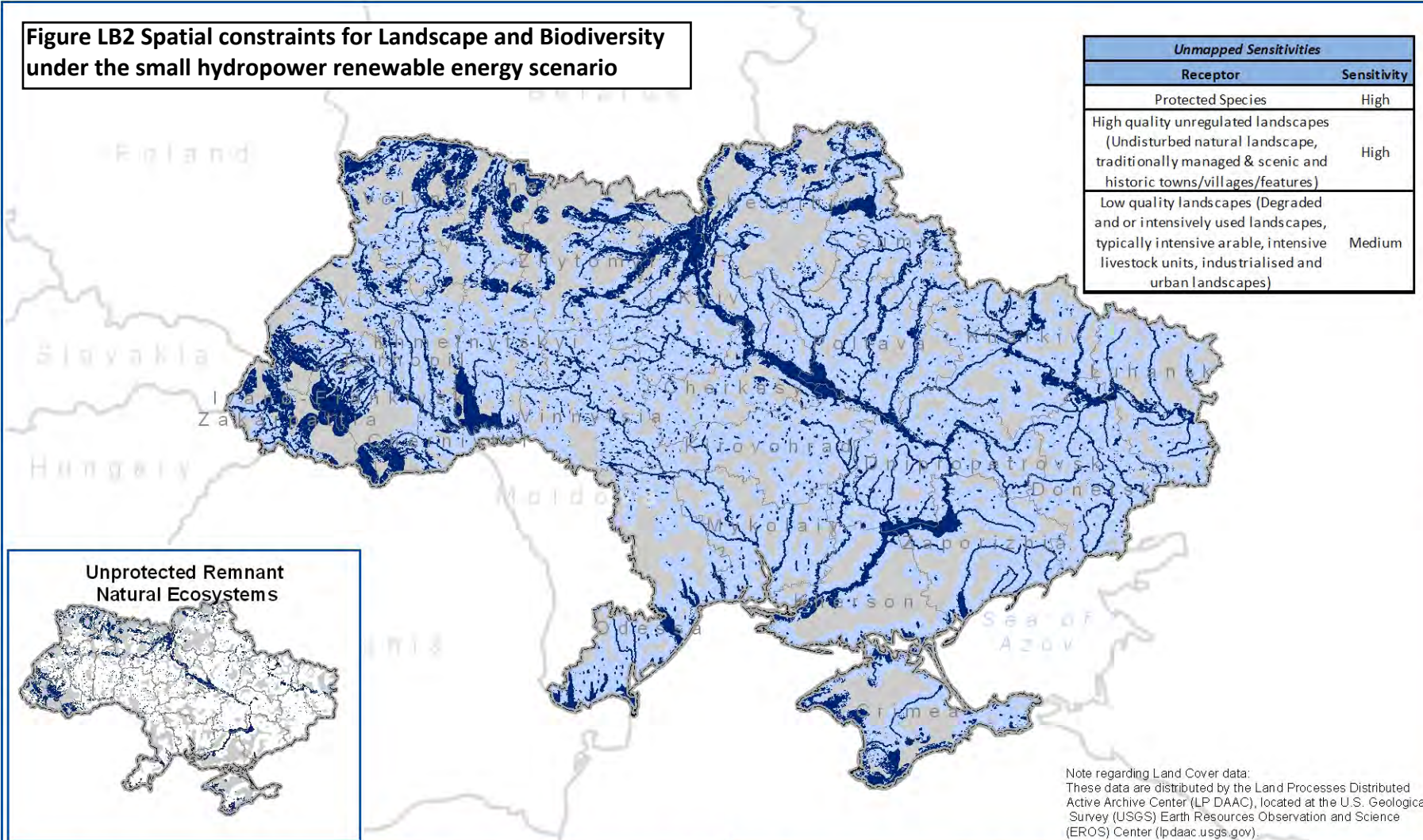
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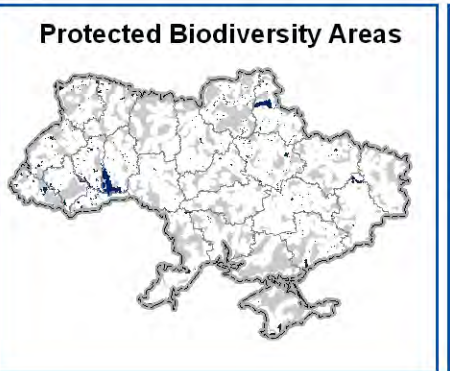
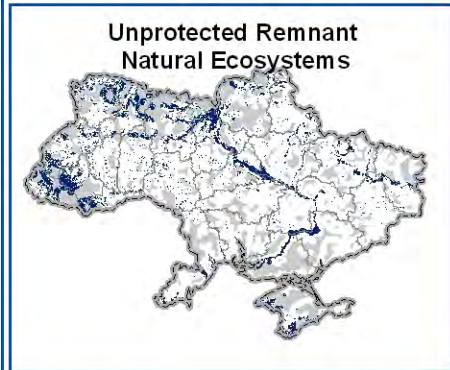
0 50 100  
Kilometers  
1 cm = 80 km



**Figure LB2 Spatial constraints for Landscape and Biodiversity under the small hydropower renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	High
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Landscape and Biodiversity Sensitivity to Small Hydro Development**

**Legend**

**Sensitivity**

- Low
- Medium
- High
- Technical Exclusions

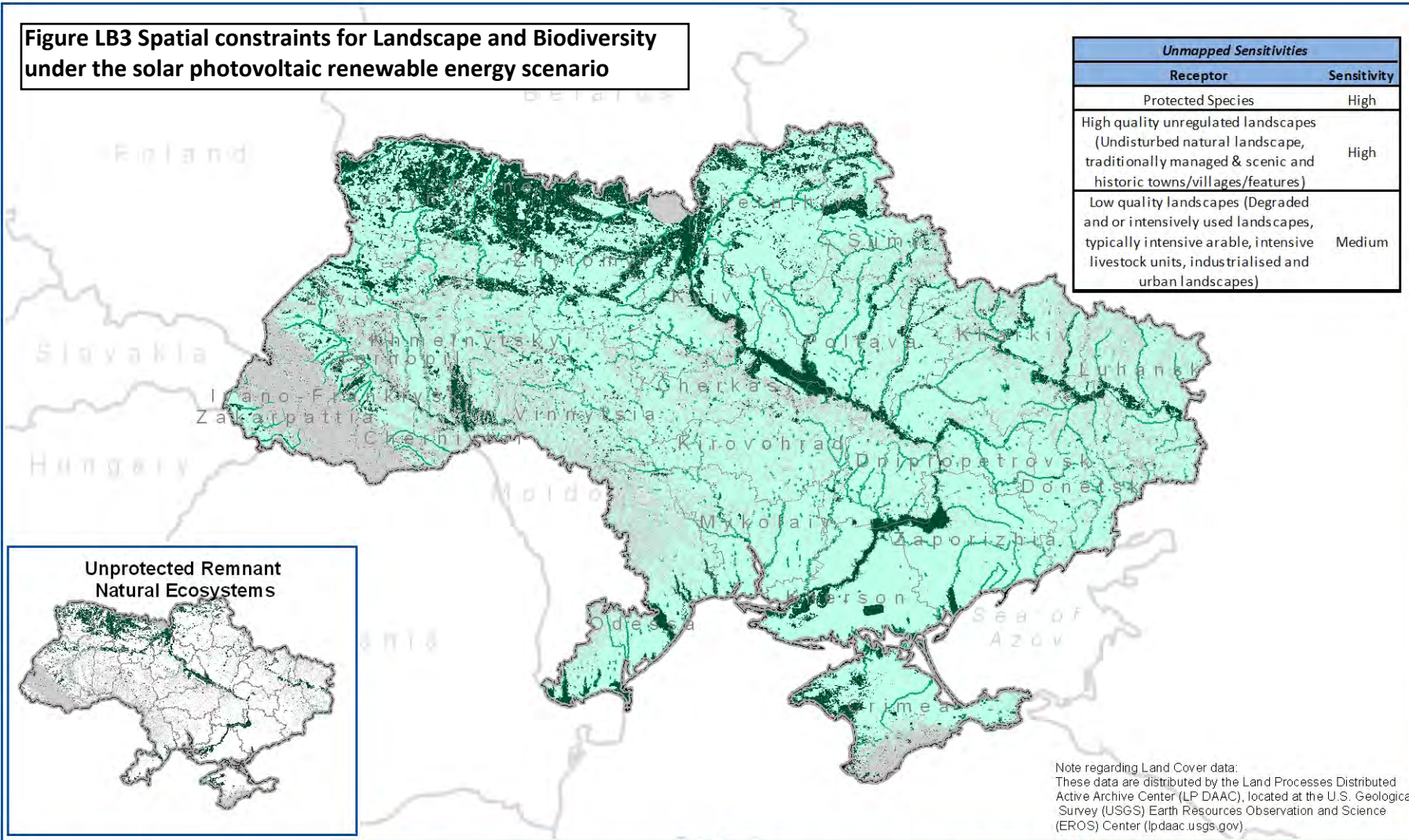
Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement

Note regarding Land Cover data: These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)

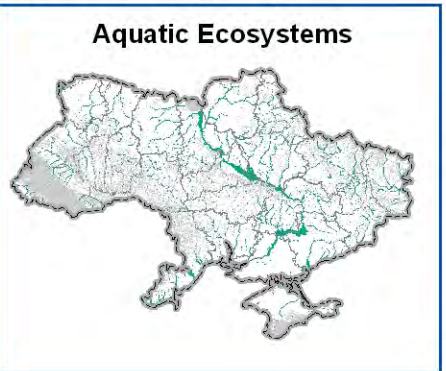
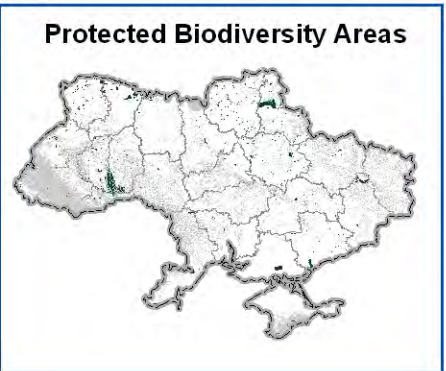
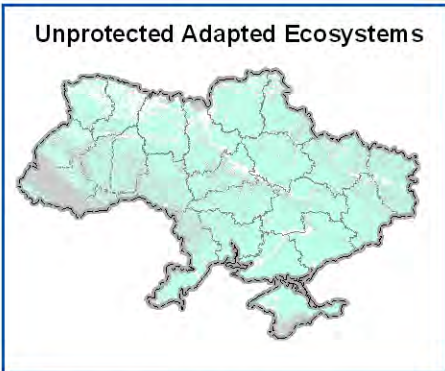
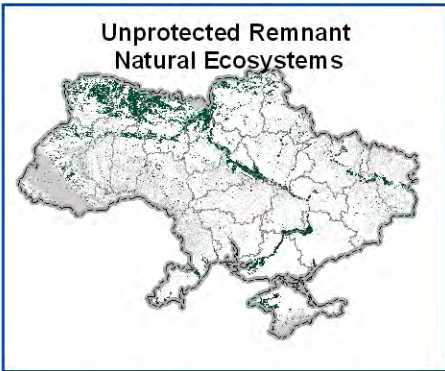


0 50 100  
Kilometers  
1 cm = 80 km

**Figure LB3 Spatial constraints for Landscape and Biodiversity under the solar photovoltaic renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	High
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



Note regarding Land Cover data:  
These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Landscape and Biodiversity Sensitivity to Solar Development**

- Legend**
- Technical Exclusions
  - Sensitivity**
    - Low
    - Medium
    - High

Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement



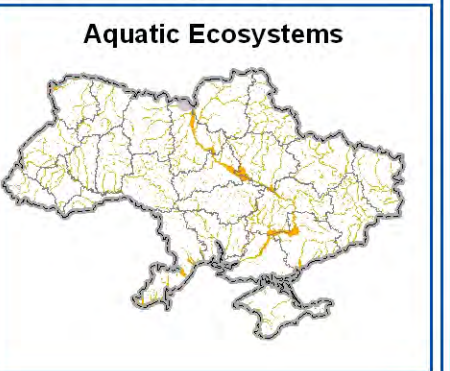
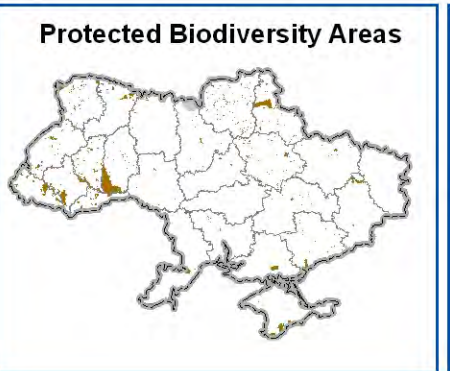
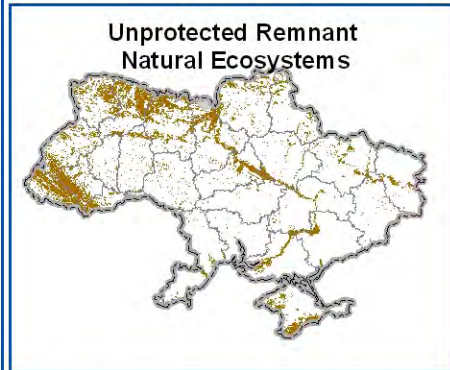
0 50 100  
Kilometers  
1 cm = 80 km



**Figure LB4 Spatial constraints for Landscape and Biodiversity under the biomass renewable energy scenario using agricultural residues**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	High
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



Note regarding Land Cover data:  
These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Landscape and Biodiversity Sensitivity to Agricultural Residues Biomass Development**

- Legend**
- Technical Exclusion
  - Sensitivity**
    - Low
    - Medium
    - High

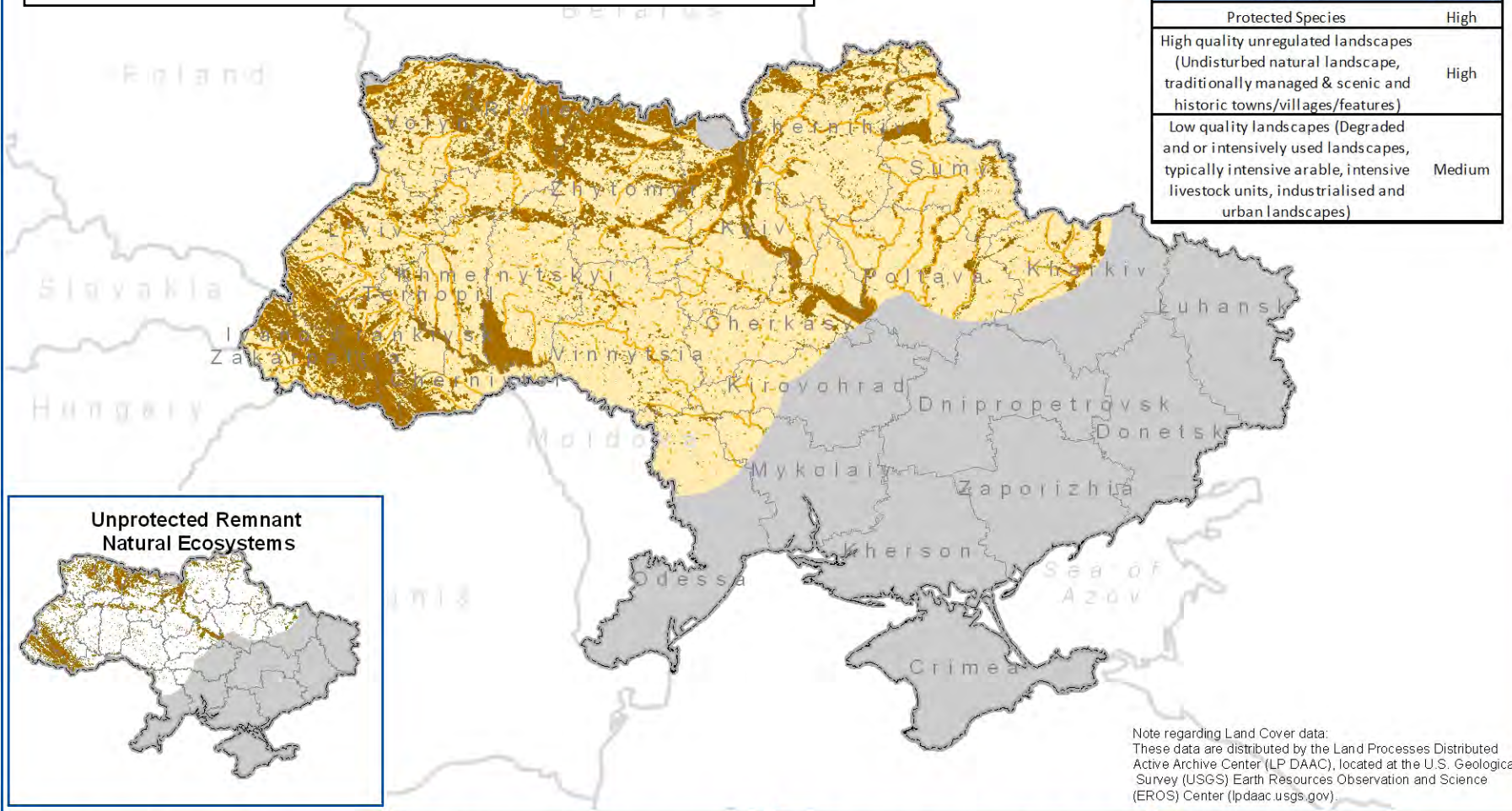
Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement



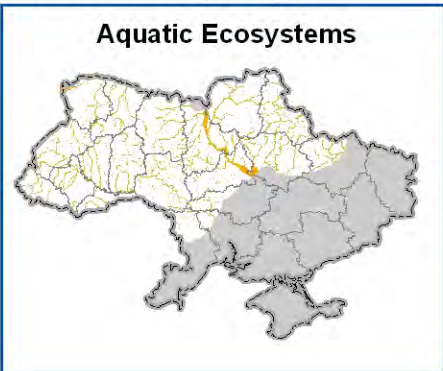
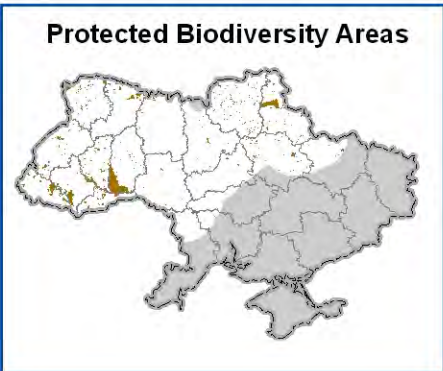
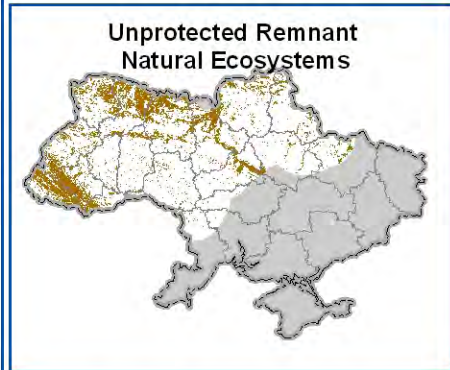
0 50 100  
Kilometers  
1 cm = 80 km



**Figure LB5 Spatial constraints for Landscape and Biodiversity under the biomass renewable energy scenario using wood residues**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	High
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Landscape and Biodiversity Sensitivity to Wood Residues Biomass Development**

- Legend**
- Technical Exclusion
  - Sensitivity
    - Low
    - Medium
    - High

Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement

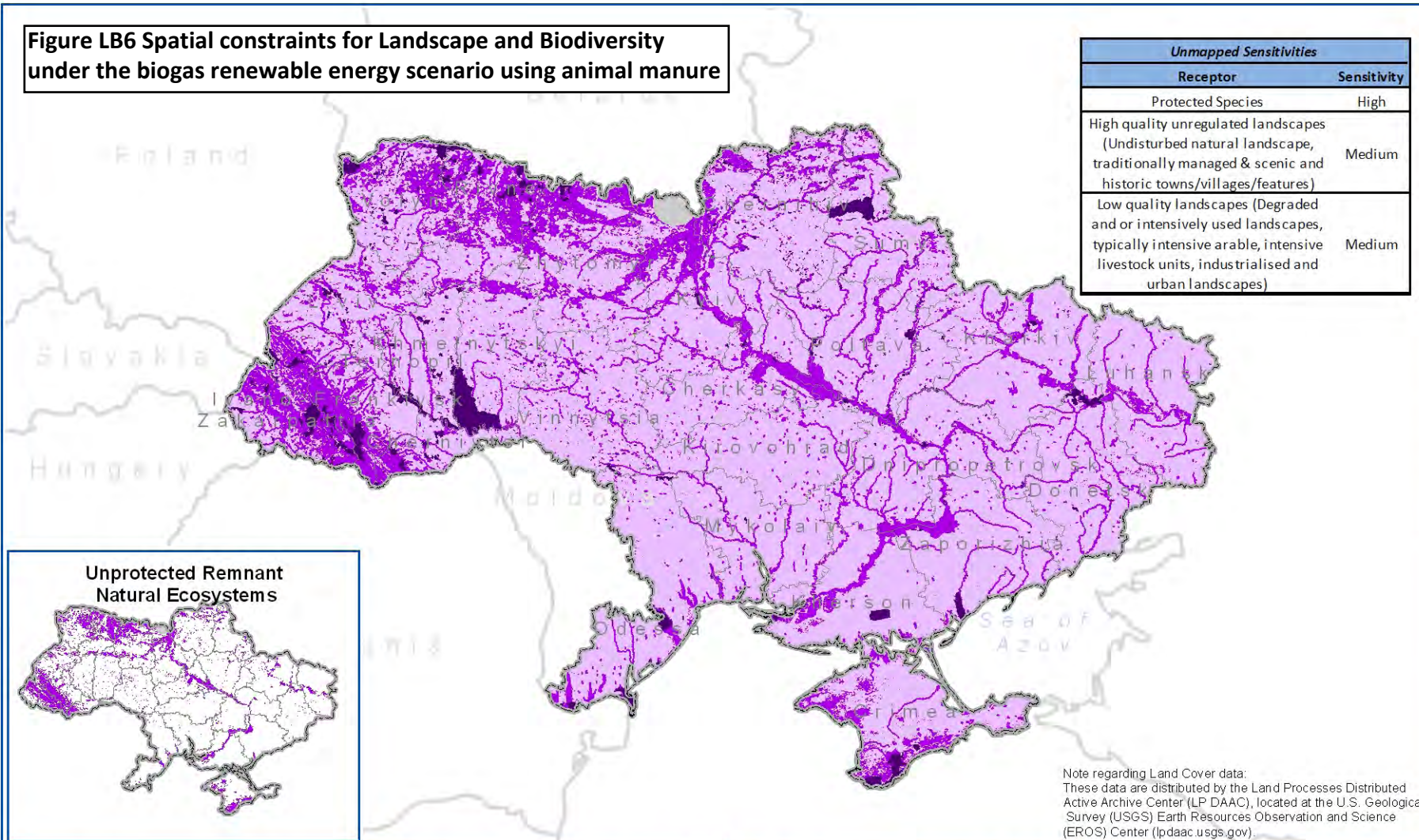


0 50 100  
Kilometers  
1 cm = 80 km

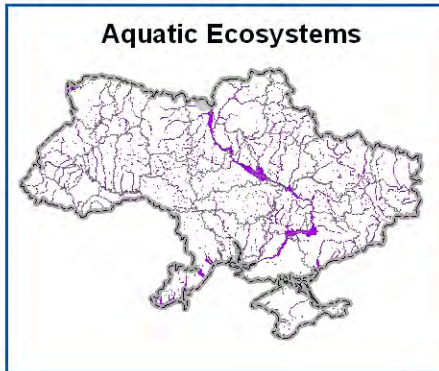
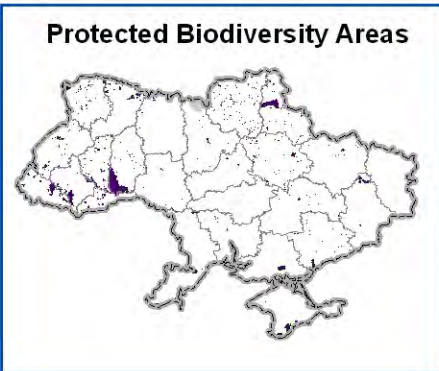
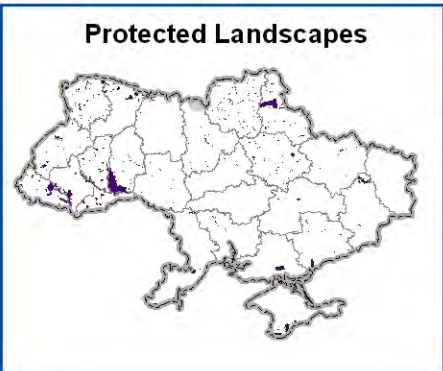
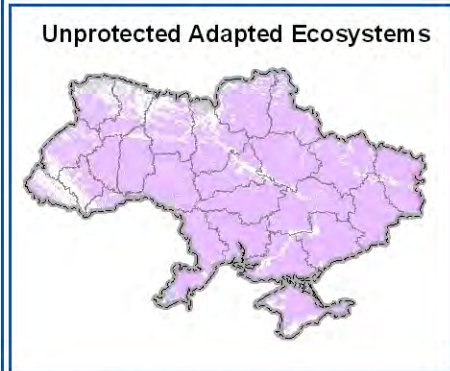
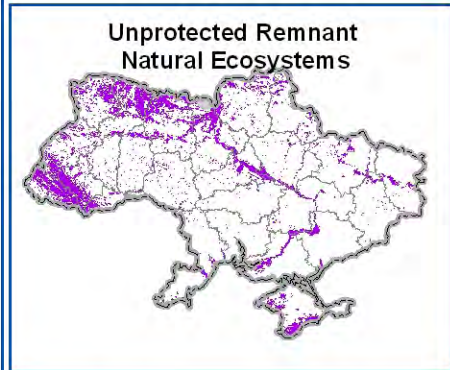
Note regarding Land Cover data: These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)



**Figure LB6 Spatial constraints for Landscape and Biodiversity under the biogas renewable energy scenario using animal manure**



Unmapped Sensitivities	
Receptor	Sensitivity
Protected Species	High
High quality unregulated landscapes (Undisturbed natural landscape, traditionally managed & scenic and historic towns/villages/features)	Medium
Low quality landscapes (Degraded and or intensively used landscapes, typically intensive arable, intensive livestock units, industrialised and urban landscapes)	Medium



Note regarding Land Cover data:  
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**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Landscape and Biodiversity Sensitivity to Animal Manure Biogas Development**

- Legend**
- Technical Exclusion
  - Sensitivity**
    - Low
    - Medium
    - High

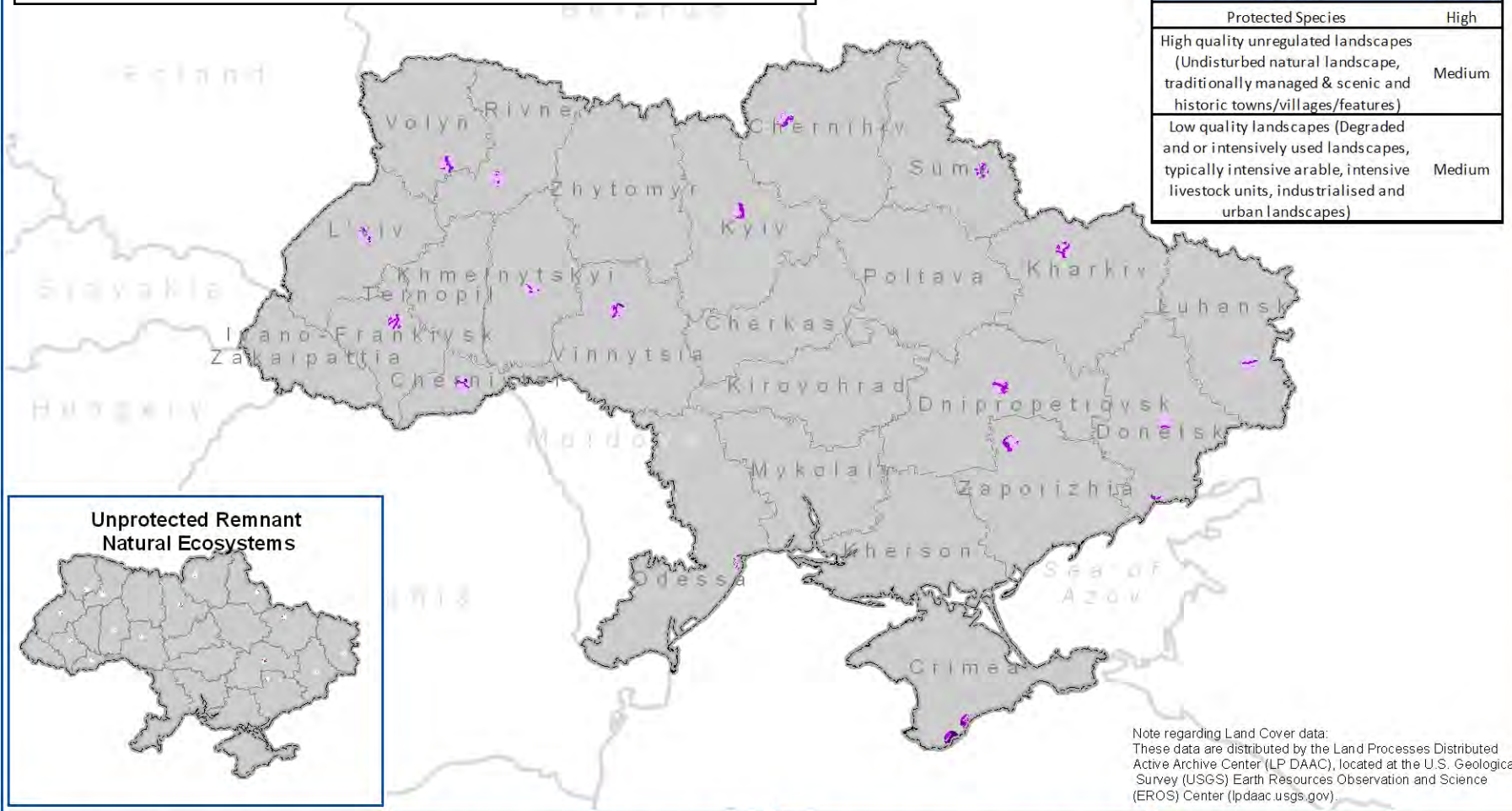
Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement



0 50 100  
Kilometers  
1 cm = 80 km



**Figure LB7 Spatial constraints for Landscape and Biodiversity under the biogas renewable energy scenario using municipal landfill gas**



**Ukraine Sustainable Energy Lending Facility Strategic Review Environmental Review**

**Landscape and Biodiversity Sensitivity to Landfill Gas Biogas Development**

- Legend**
- Technical Exclusion
  - Sensitivity**
    - Low
    - Medium
    - High

Data Sources: MODIS MOD1201v5 Land Cover, World Database on Protected Areas; DeLorme; ArcWorld Supplement

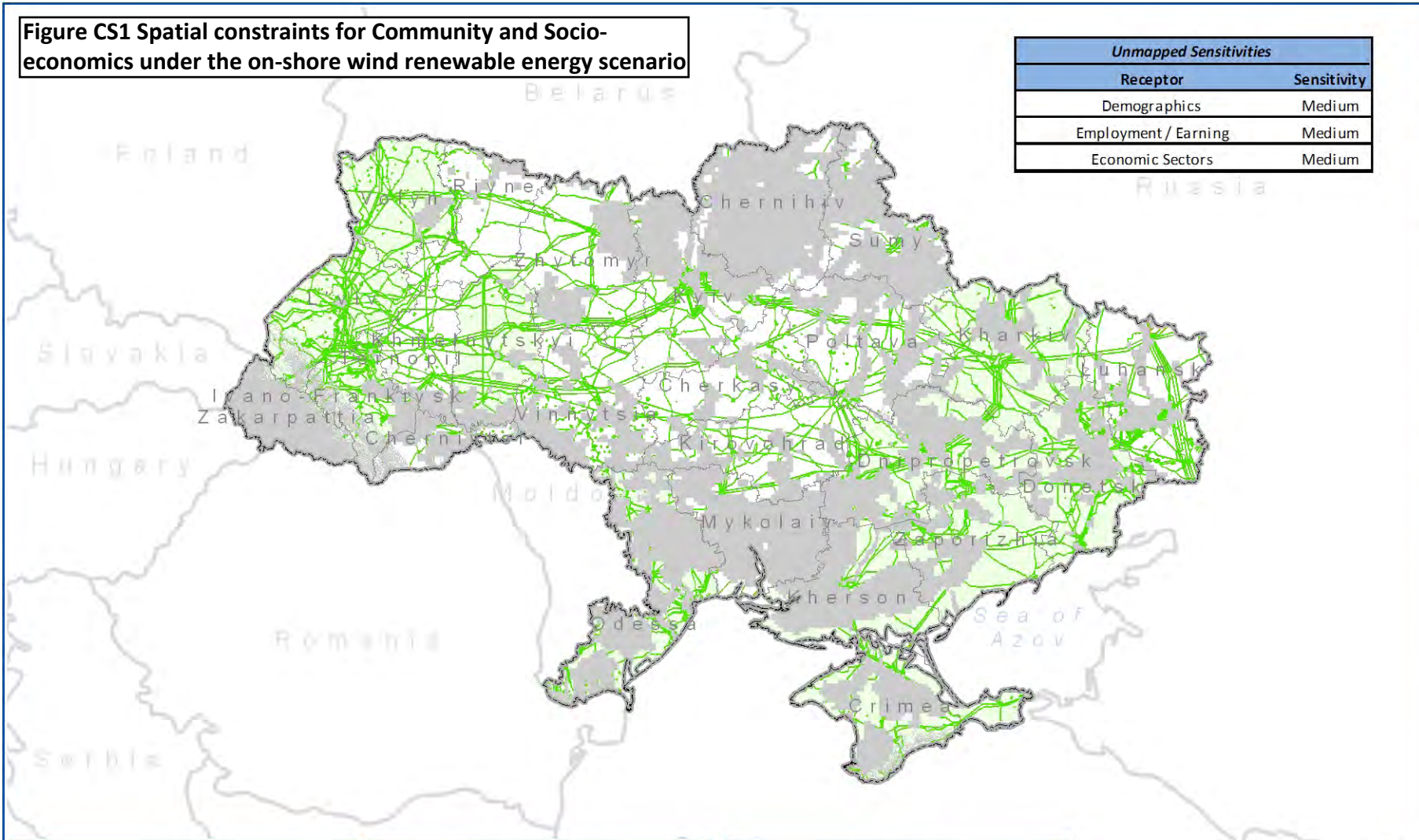


0 50 100  
Kilometers  
1 cm = 80 km

Note regarding Land Cover data: These data are distributed by the Land Processes Distributed Active Archive Center (LP DAAC), located at the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center (lpdaac.usgs.gov)



**Figure CS1 Spatial constraints for Community and Socio-economics under the on-shore wind renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Socioeconomic Sensitivity to Wind Development**

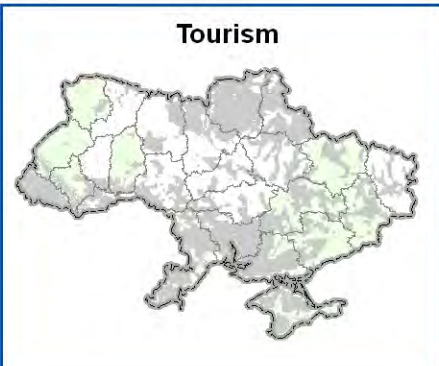
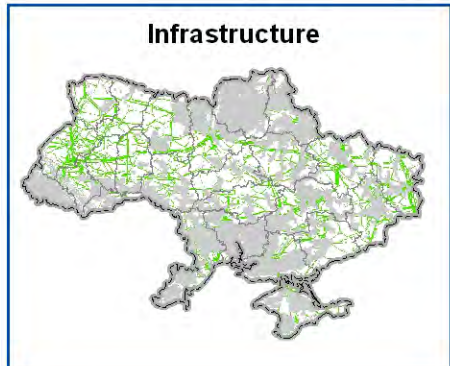
**Legend**

- Technical Exclusions
- Sensitivity**
  - Low
  - Medium
  - High

Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement

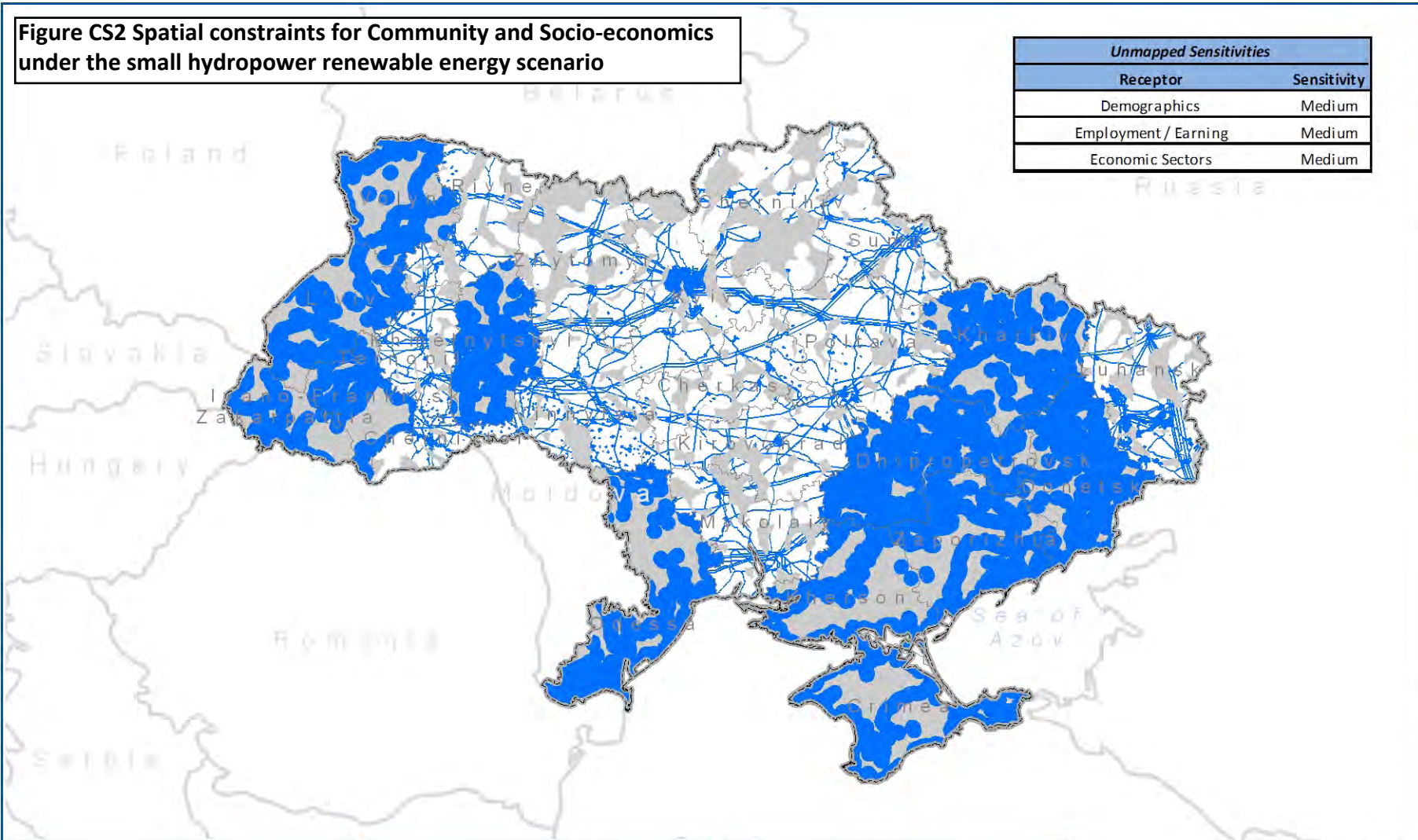


0 50 100  
Kilometers  
1 cm = 80 km





**Figure CS2 Spatial constraints for Community and Socio-economics under the small hydropower renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Socioeconomic Sensitivity to Small Hydro Development**

**Legend**

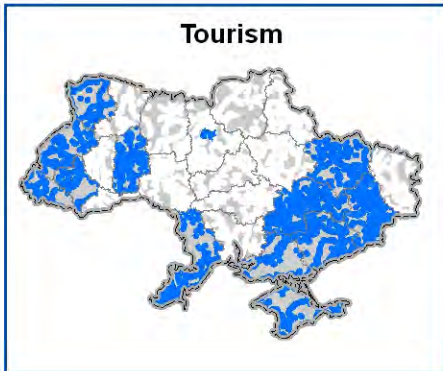
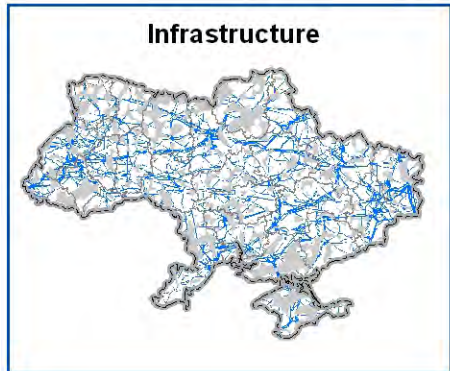
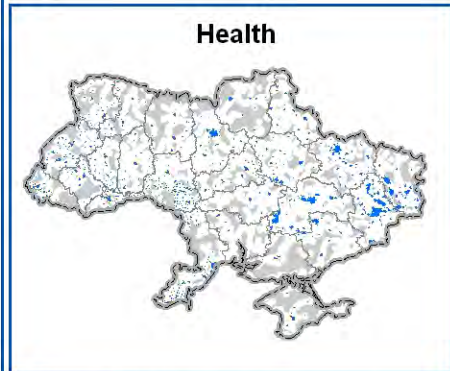
**Sensitivity**

- Low
- Medium
- High
- Technical Exclusions

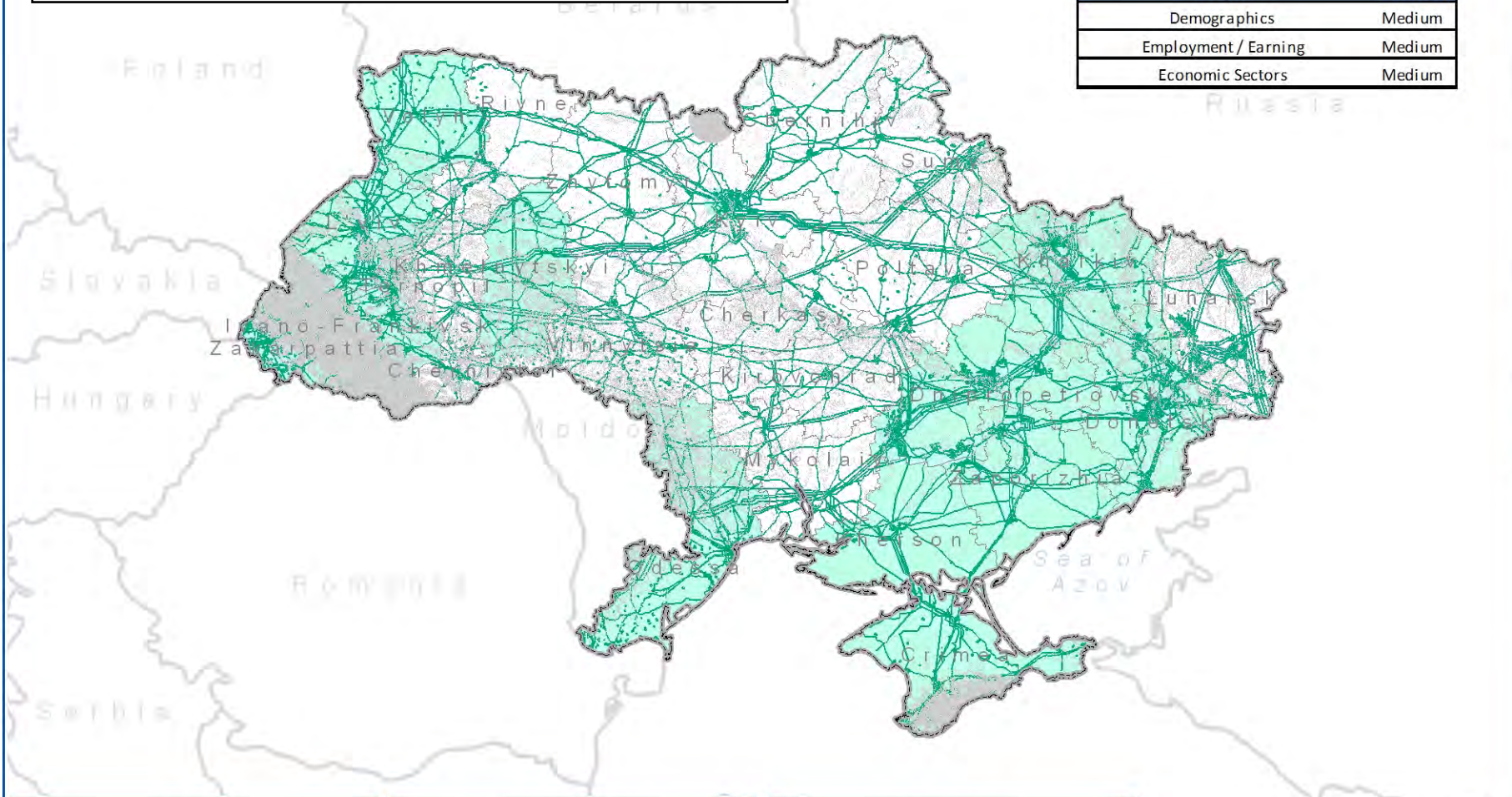
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



0 50 100  
Kilometers  
1 cm = 80 km



**Figure CS3 Spatial constraints for Community and Socio-economics under the solar photovoltaic renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Socioeconomic Sensitivity to Solar Development**

- Legend**
- Technical Exclusions
  - Sensitivity**
    - Low
    - Medium
    - High

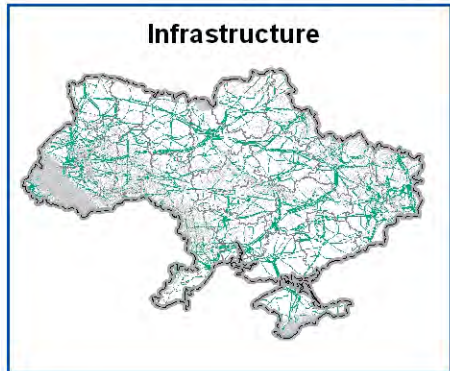
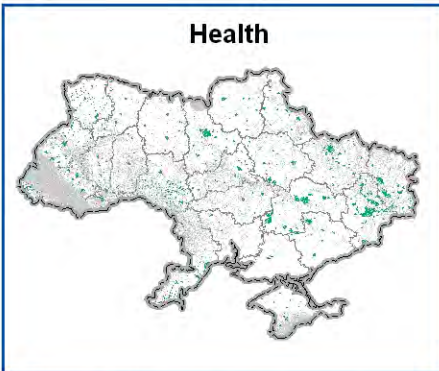
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



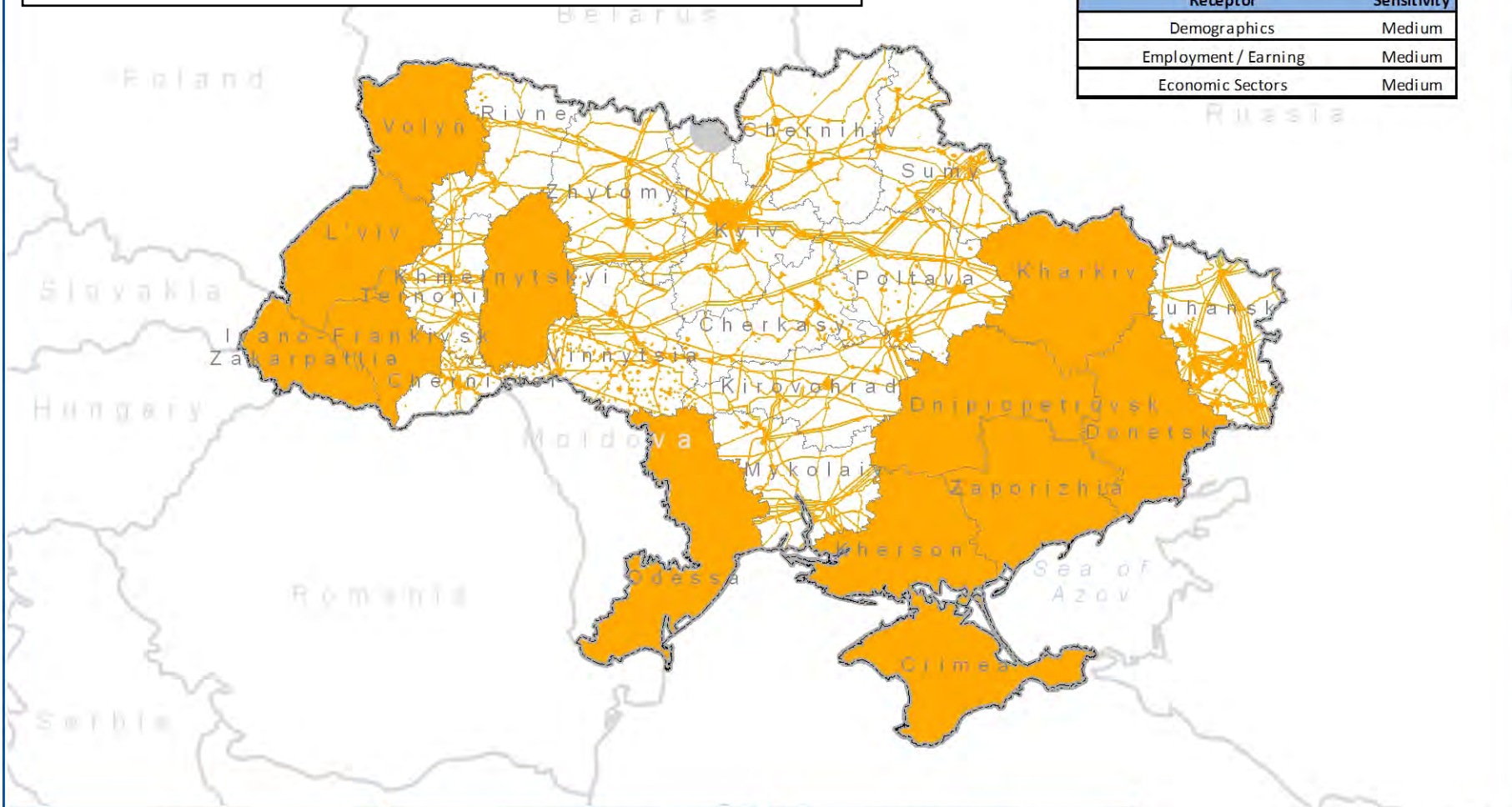
0 50 100

Kilometers

1 cm = 80 km



**Figure CS4 Spatial constraints for Community and Socio-economics under the biomass renewable energy scenario using agricultural residues**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

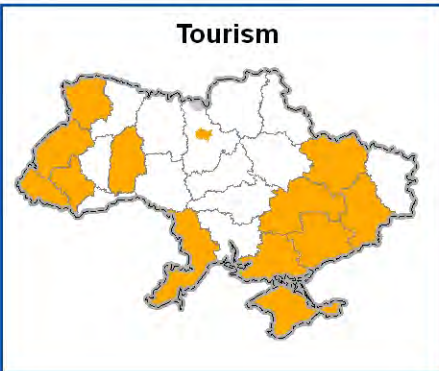
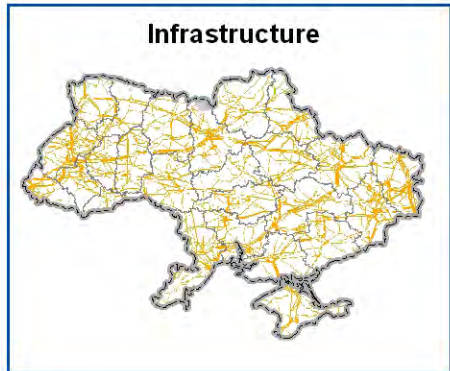
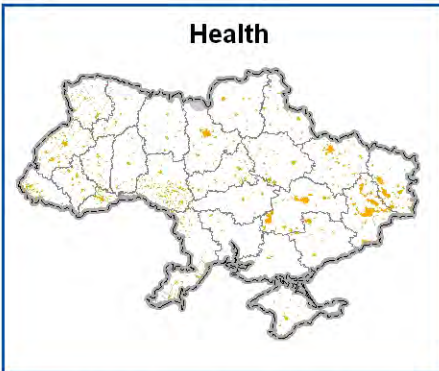
**Socioeconomic Sensitivity to Agricultural Residues Biomass Development**

- Legend**
- Technical Exclusion
  - Sensitivity
    - Low
    - Medium
    - High

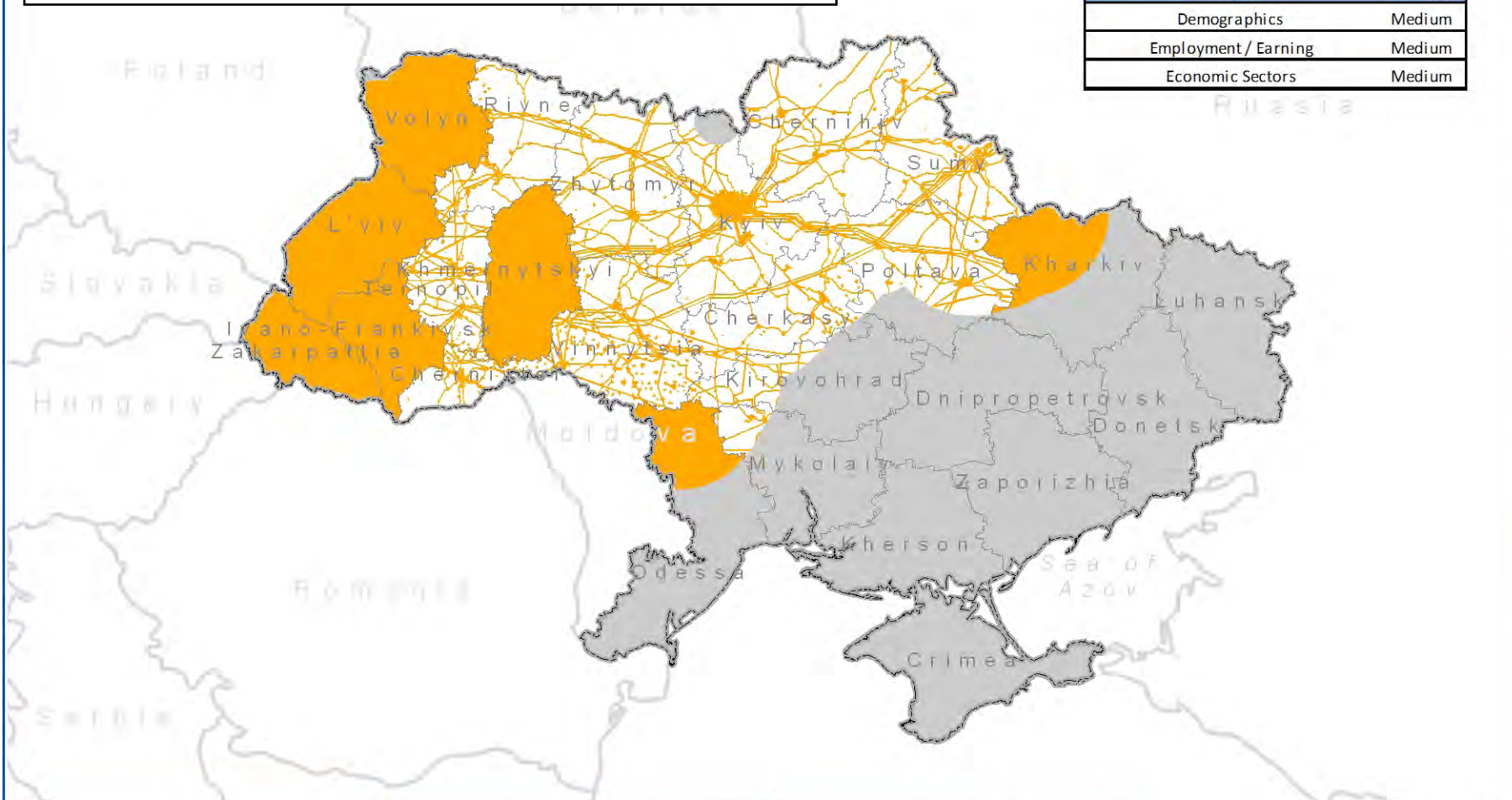
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



0 50 100  
Kilometers  
1 cm = 80 km



**Figure CS5 Spatial constraints for Community and Socio-economics under the biomass renewable energy scenario using wood residues**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Socioeconomic Sensitivity to Wood Residues Biomass Development**

**Legend**

- Technical Exclusion
- Low Sensitivity
- Medium Sensitivity
- High Sensitivity

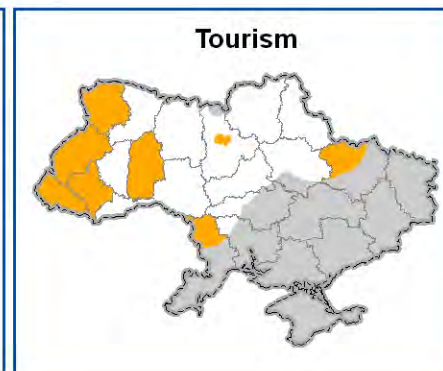
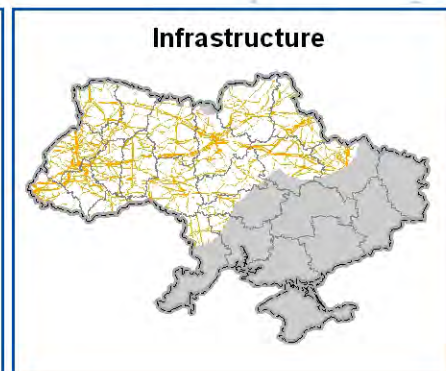
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



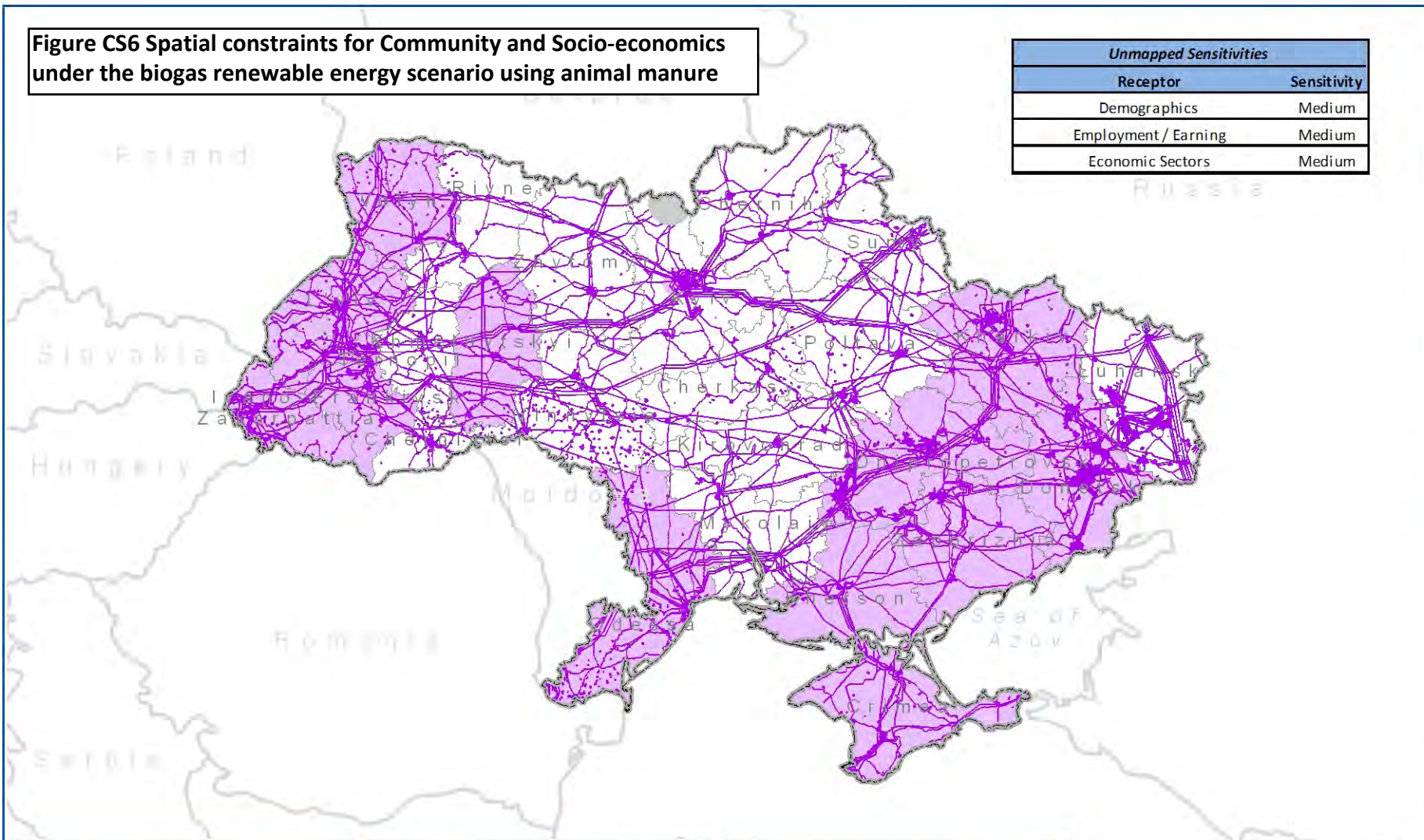
0 50 100

Kilometers

1 cm = 80 km



**Figure CS6 Spatial constraints for Community and Socio-economics under the biogas renewable energy scenario using animal manure**



Unmapped Sensitivities	
Receptor	Sensitivity
Demographics	Medium
Employment / Earning	Medium
Economic Sectors	Medium

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

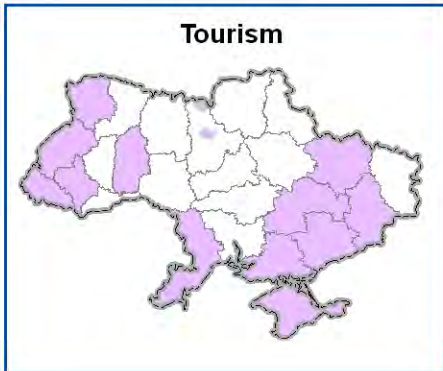
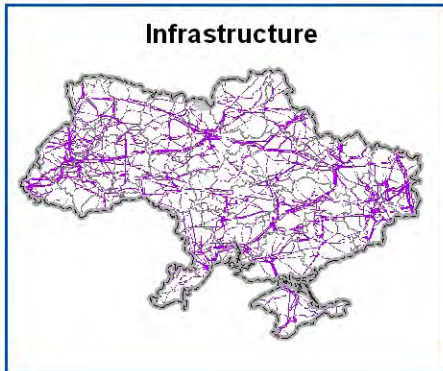
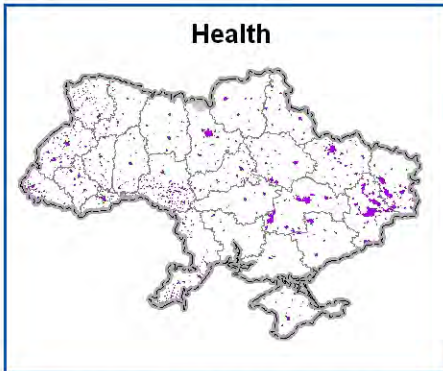
**Socioeconomic Sensitivity to Animal Manure Biogas Development**

- Legend**
- Technical Exclusion
  - Sensitivity
    - Low
    - Medium
    - High

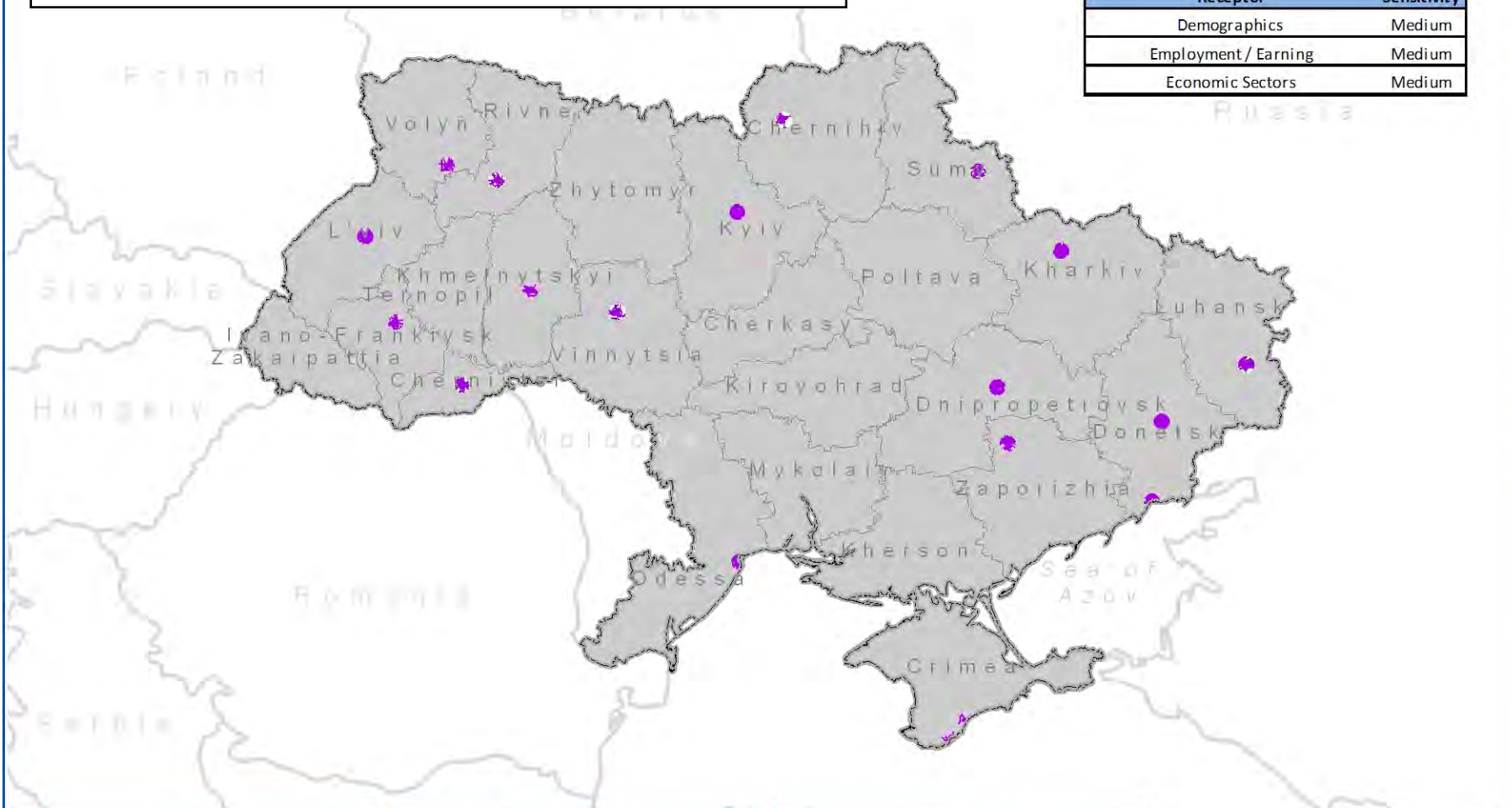
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



0 50 100  
Kilometers  
1 cm = 80 km



**Figure CS7 Spatial constraints for Community and Socio-economics under the biogas renewable energy scenario using municipal landfill gas**



**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**

**Socioeconomic Sensitivity to Landfill Gas Biogas Development**

**Legend**

- Technical Exclusion

**Sensitivity**

- Low
- Medium
- High

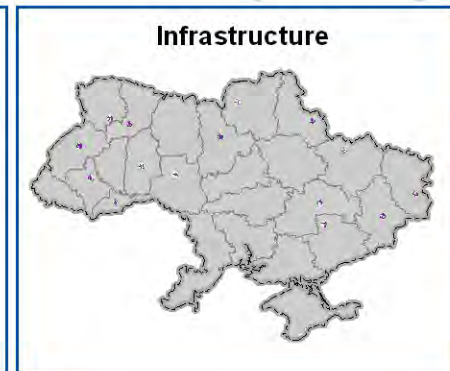
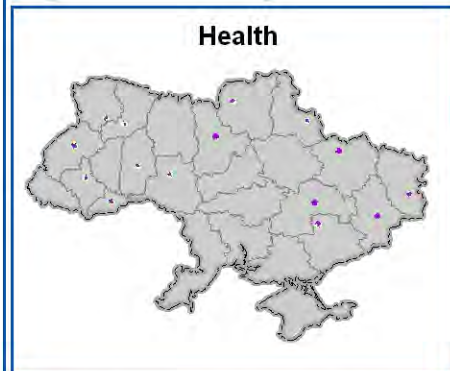
Data Sources: National Atlas of Ukraine; DeLorme; ArcWorld Supplement



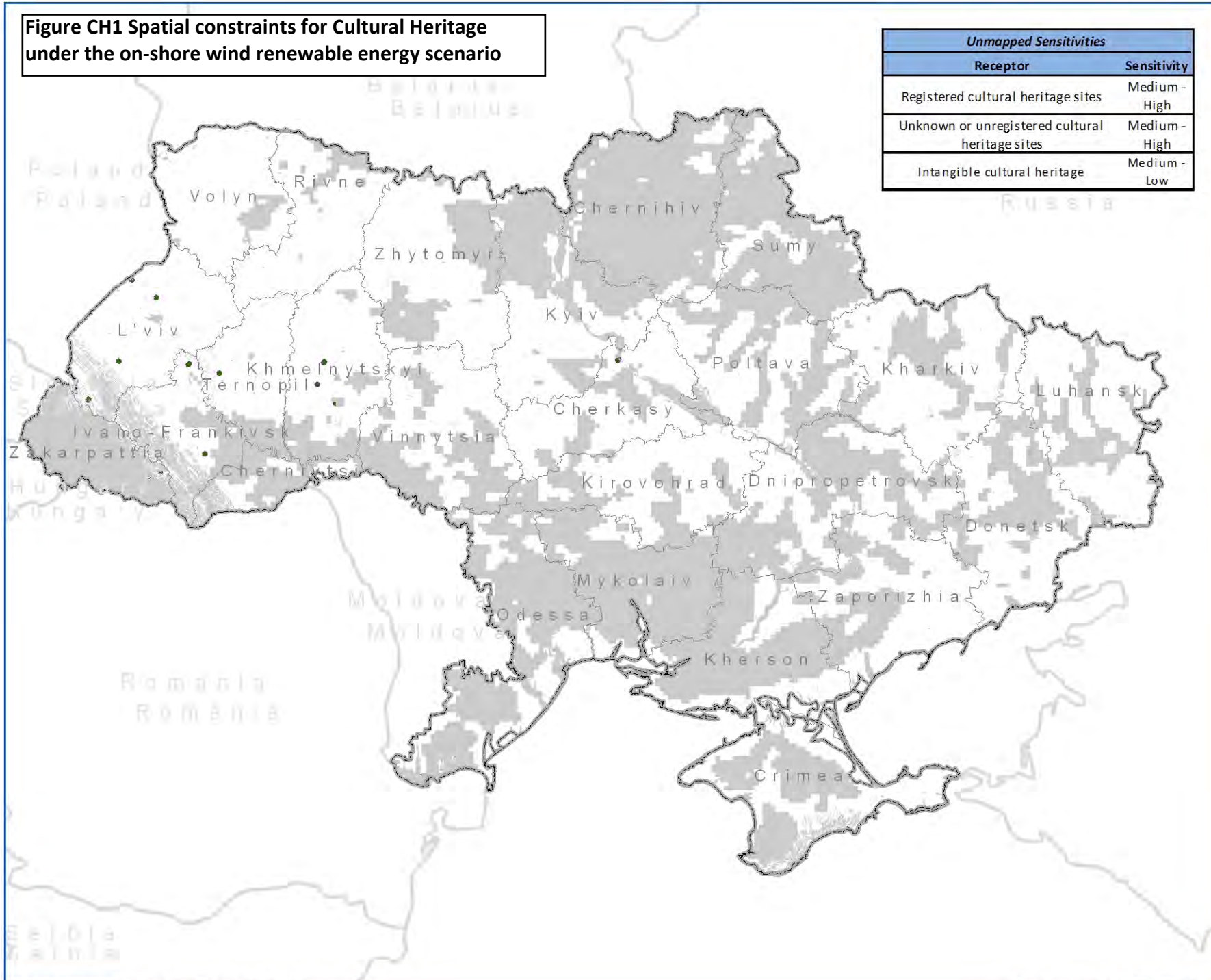
0 50 100

Kilometers

1 cm = 80 km



**Figure CH1 Spatial constraints for Cultural Heritage under the on-shore wind renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Registered cultural heritage sites	Medium - High
Unknown or unregistered cultural heritage sites	Medium - High
Intangible cultural heritage	Medium - Low

**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**  
**Cultural Heritage Sensitivity to Wind Development**

**Legend**

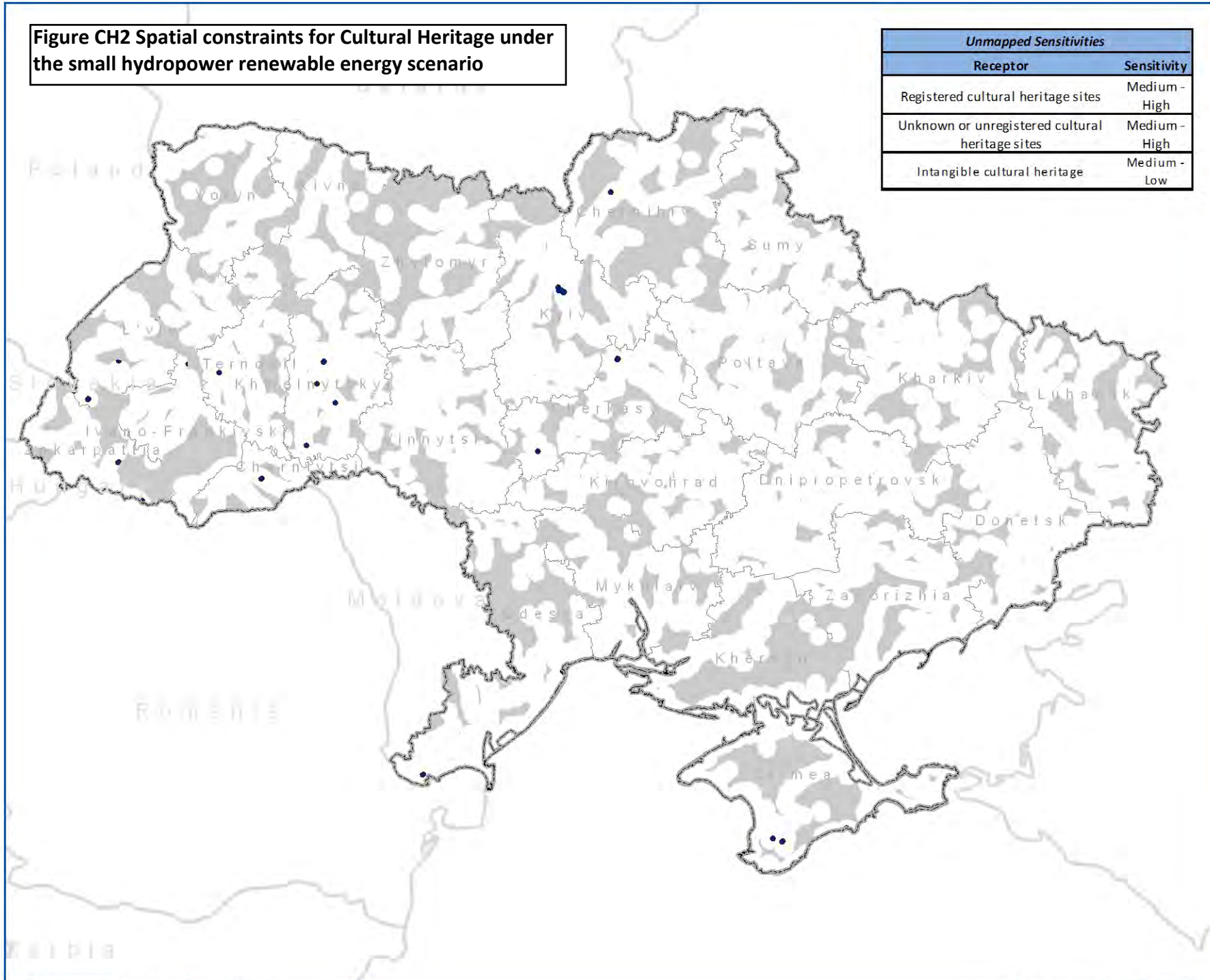
- Technical Exclusions

**Sensitivity**

- Low
- Medium
- High

0 50 100  
Kilometers  
1 cm = 60 km

**Figure CH2 Spatial constraints for Cultural Heritage under the small hydropower renewable energy scenario**



Unmapped Sensitivities	
Receptor	Sensitivity
Registered cultural heritage sites	Medium - High
Unknown or unregistered cultural heritage sites	Medium - High
Intangible cultural heritage	Medium - Low

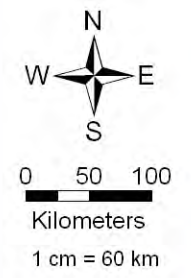
**Ukraine Sustainable Energy Lending Facility Strategic Environmental Review**  
**Cultural Heritage Sensitivity to Small Hydro Development**

**Legend**

- Technical Exclusions

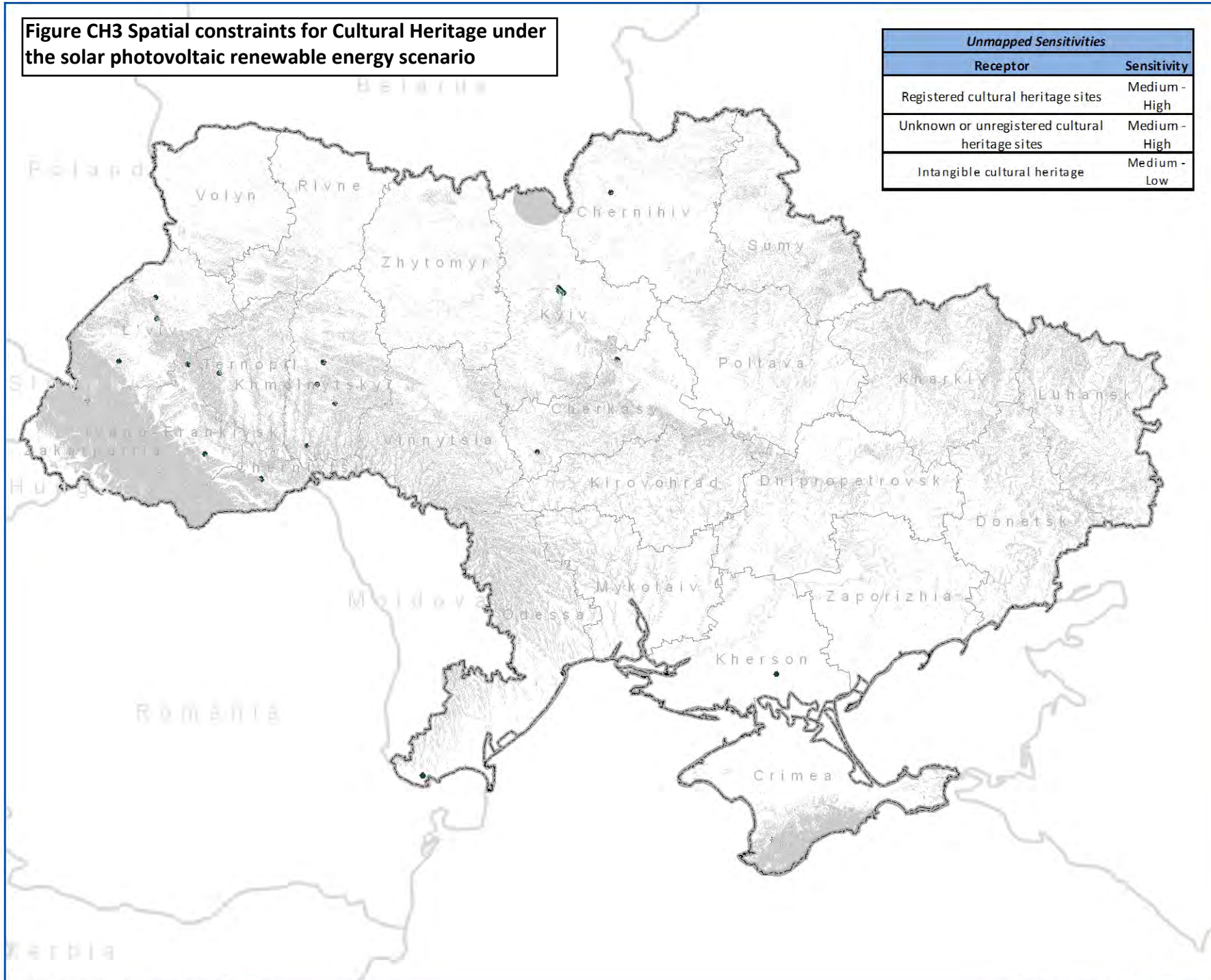
**Sensitivity**

- None
- Low
- Medium
- High









**Figure CH3 Spatial constraints for Cultural Heritage under the solar photovoltaic renewable energy scenario**

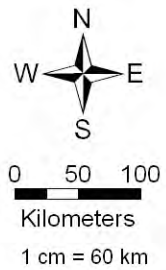


Unmapped Sensitivities	
Receptor	Sensitivity
Registered cultural heritage sites	Medium - High
Unknown or unregistered cultural heritage sites	Medium - High
Intangible cultural heritage	Medium - Low

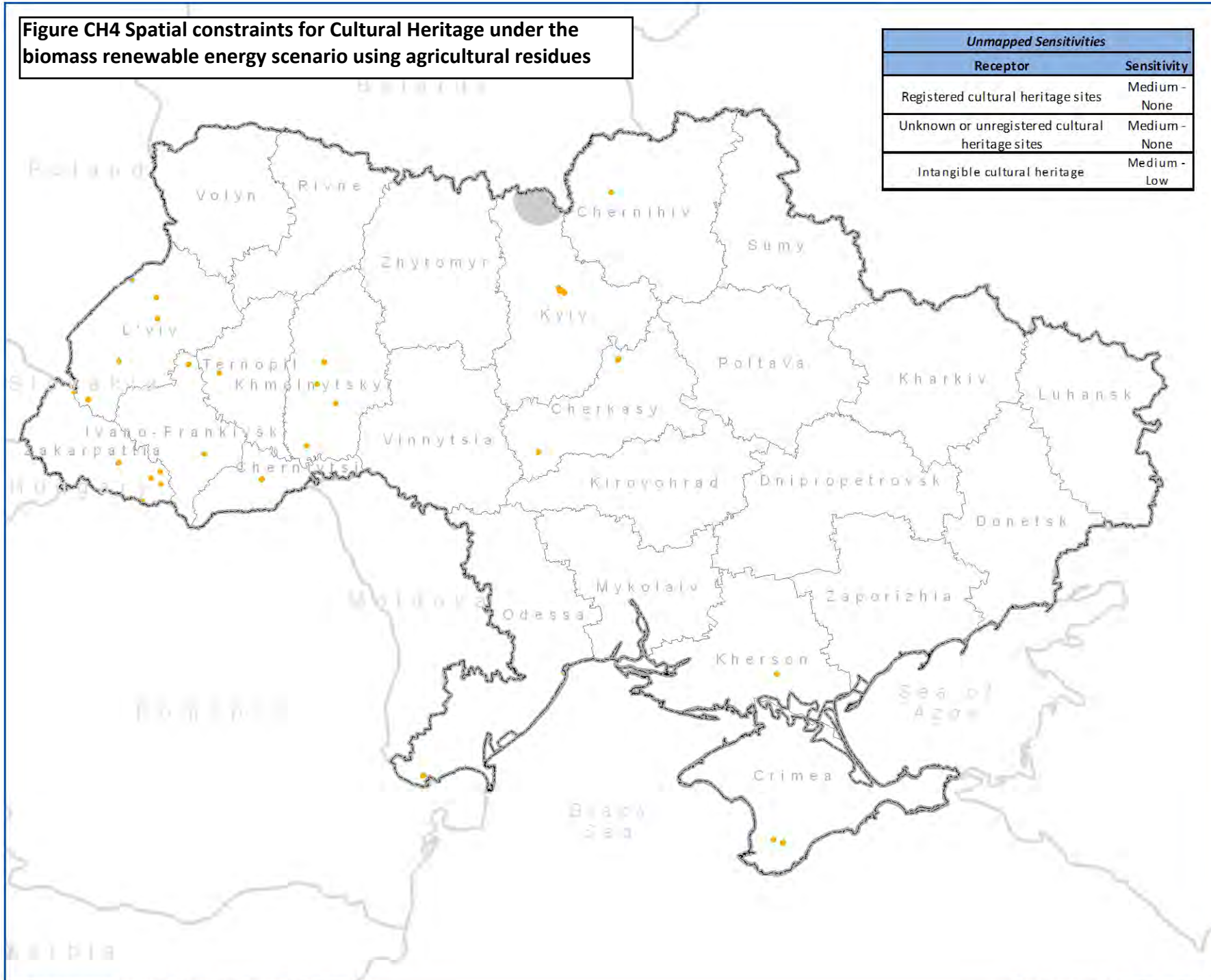
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**Cultural Heritage Sensitivity to Solar Development**

**Legend**

-  Technical Exclusions
- Sensitivity**
-  Low
-  Medium
-  High







**Figure CH4 Spatial constraints for Cultural Heritage under the biomass renewable energy scenario using agricultural residues**

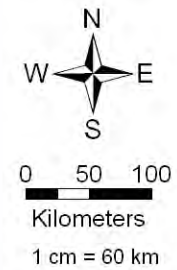


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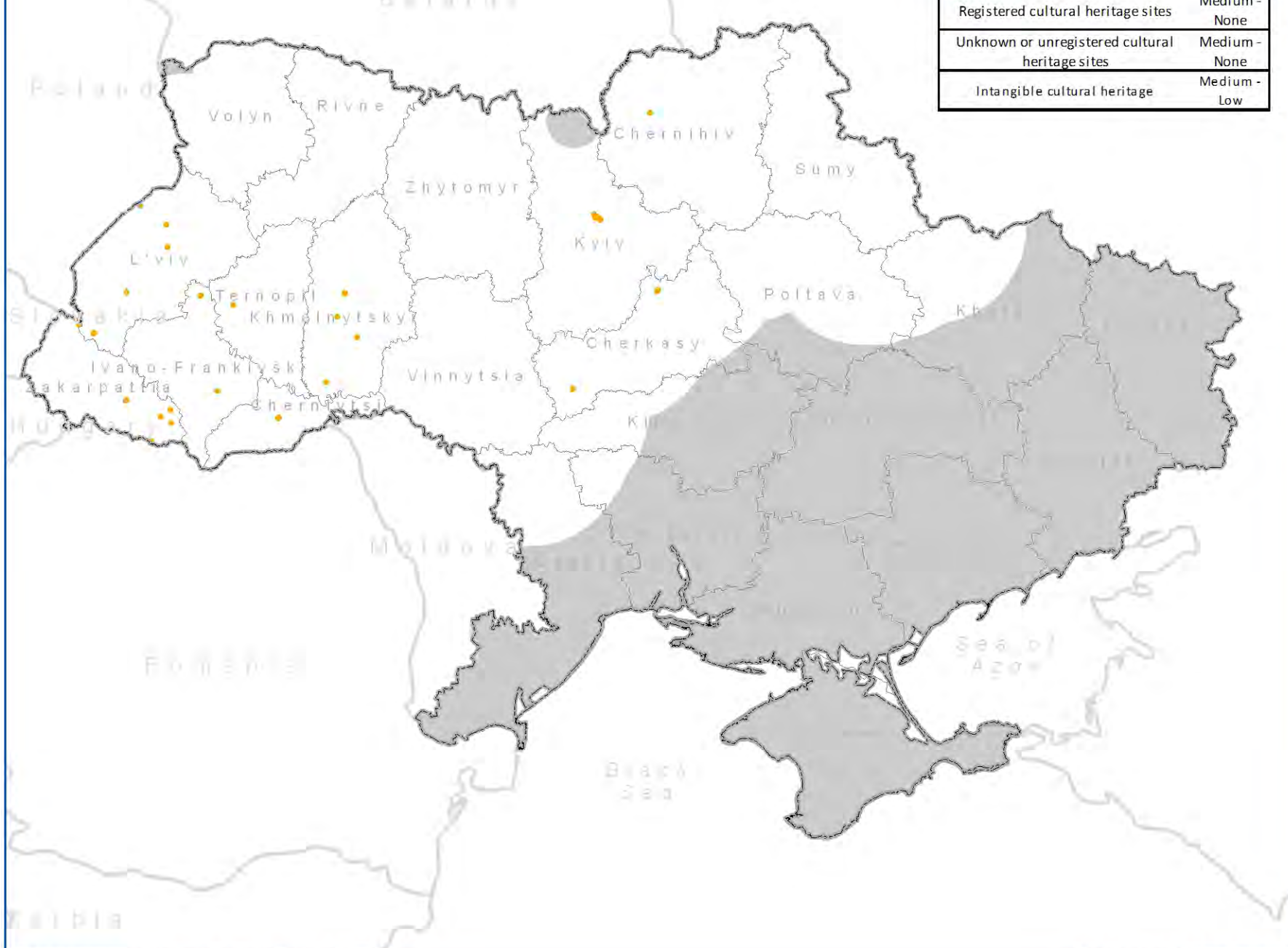
**Cultural Heritage Sensitivity to Agricultural Residues Biomass Development**

**Legend**

-  Technical Exclusion
- Sensitivity**
-  Low
-  Medium
-  High



**Figure CH5 Spatial constraints for Cultural Heritage under the biomass renewable energy scenario using wood residues**



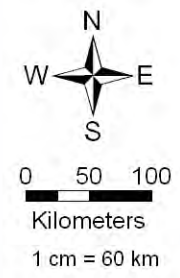
Unmapped Sensitivities	
Receptor	Sensitivity
Registered cultural heritage sites	Medium - None
Unknown or unregistered cultural heritage sites	Medium - None
Intangible cultural heritage	Medium - Low

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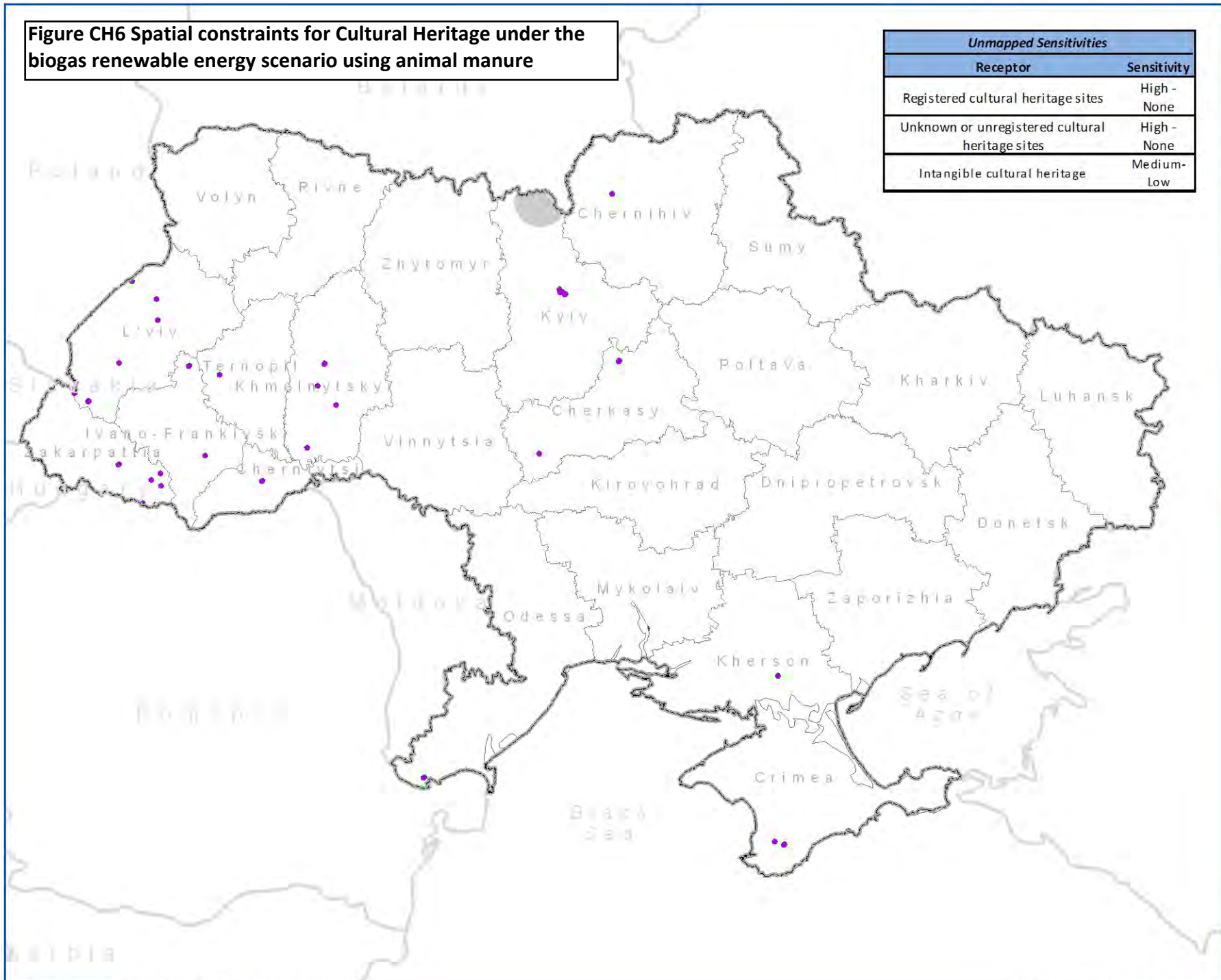
**Cultural Heritage Sensitivity to Wood Residues Biomass Development**

**Legend**

- Technical Exclusion
- Sensitivity**
- Low
- Medium
- High



**Figure CH6 Spatial constraints for Cultural Heritage under the biogas renewable energy scenario using animal manure**



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**Cultural Heritage Sensitivity to Animal Manure Biogas Development**

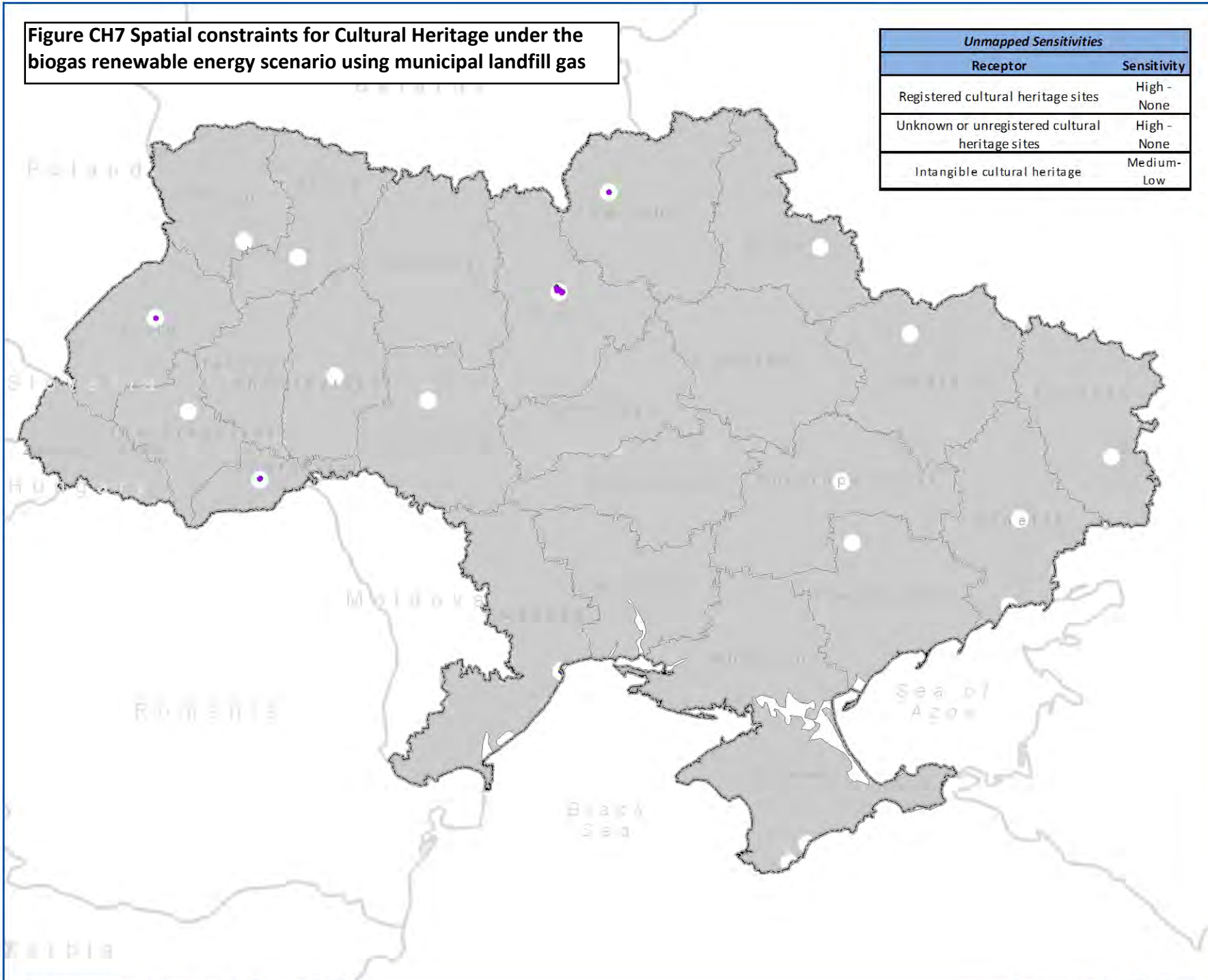
**Legend**

- Technical Exclusion
- Sensitivity**
  - Low
  - Medium
  - High

0 50 100  
Kilometers  
1 cm = 60 km



**Figure CH7 Spatial constraints for Cultural Heritage under the biogas renewable energy scenario using municipal landfill gas**



Unmapped Sensitivities	
Receptor	Sensitivity
Registered cultural heritage sites	High - None
Unknown or unregistered cultural heritage sites	High - None
Intangible cultural heritage	Medium - Low

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**Cultural Heritage Sensitivity to Landfill Gas Biogas Development**

**Legend**

- Technical Exclusion

**Sensitivity**

- Low
- Medium
- High

0 50 100  
Kilometers  
1 cm = 60 km

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