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Projet cofinancé par le Fonds Européen de Développement Régional (FEDER)
Project cofinanced by the European Regional Development Fund (ERDF)

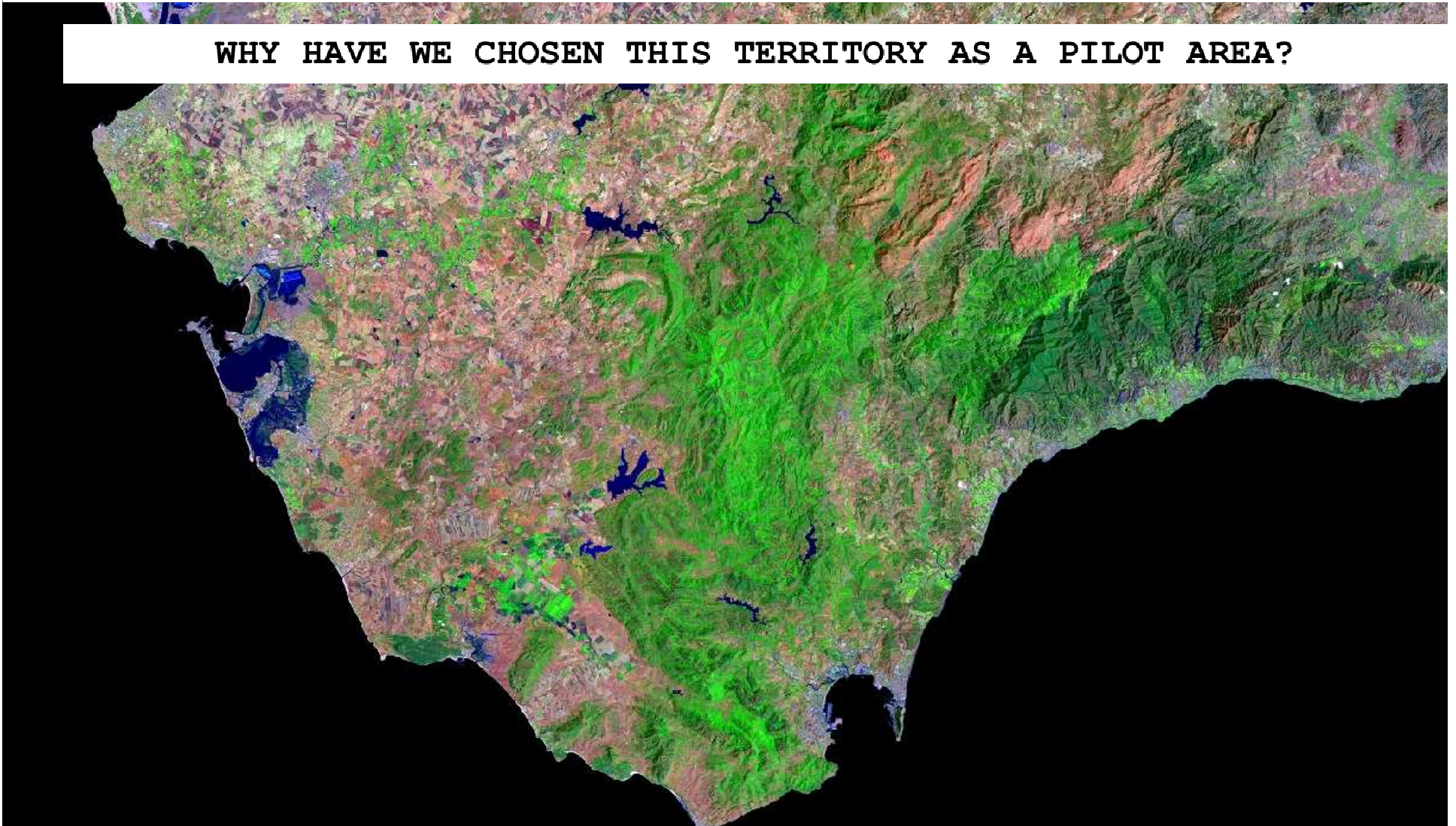


PILOT EXPERIENCE AREA THE STRAIT OF GIBRALTAR

Vercelli, 28-29 october 2010



WHY HAVE WE CHOSEN THIS TERRITORY AS A PILOT AREA?



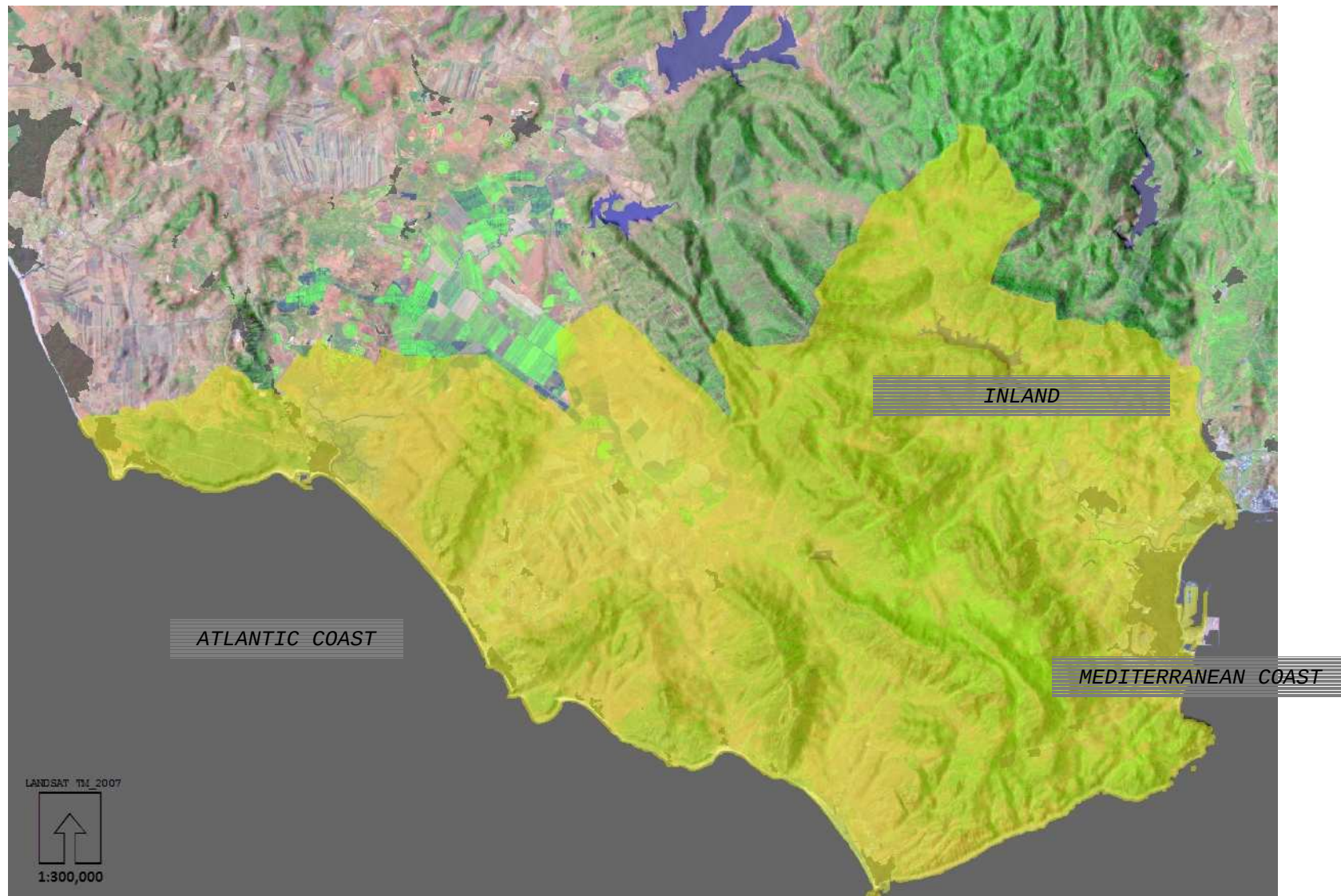
Pilot experience area: The Strait of Gibraltar

REASONS



Pilot experience area: The Strait of Gibraltar

LANDSCAPE > GEOGRAPHY ASPECTS



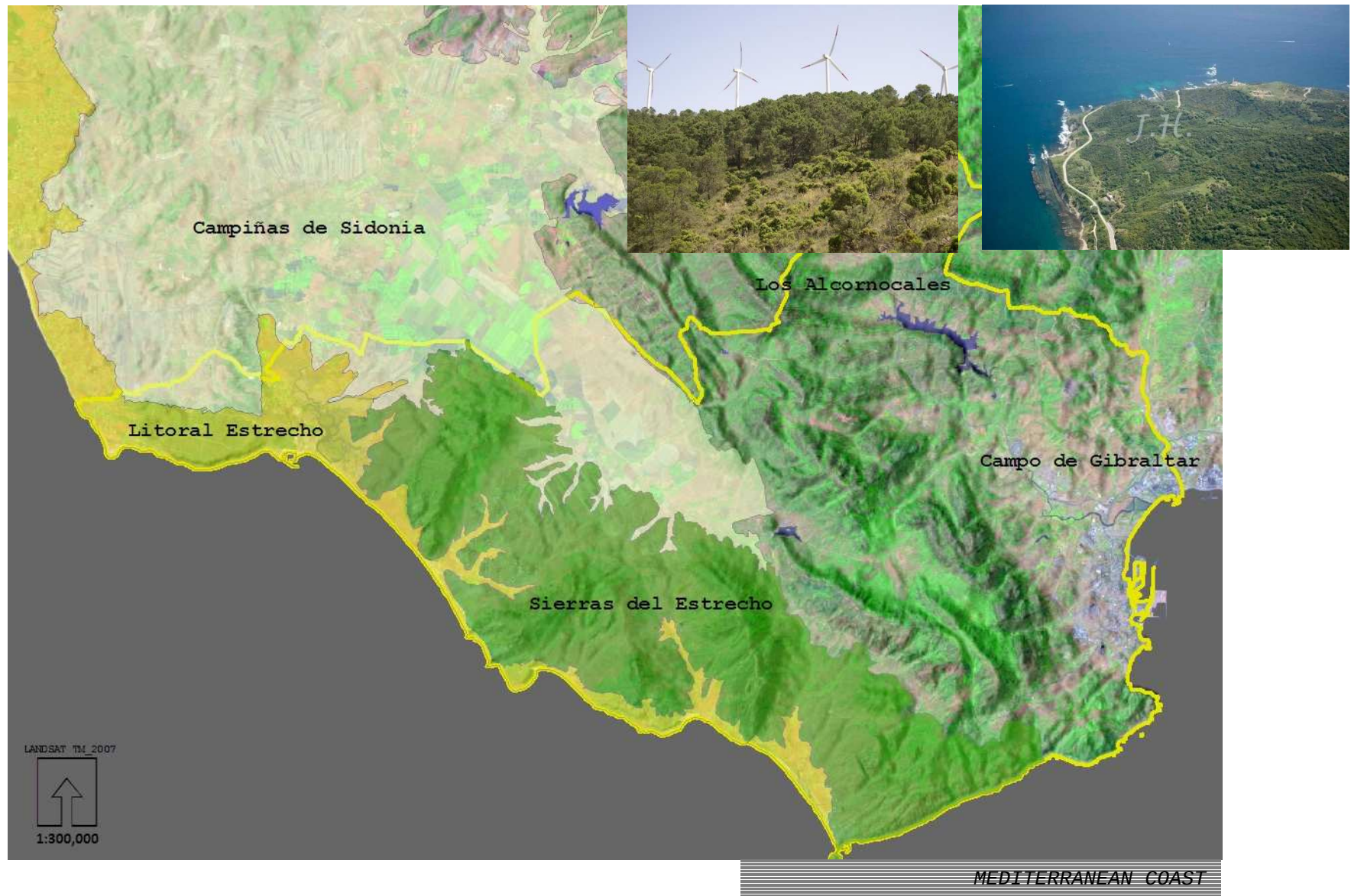
LOCATION: South end of the Spanish mainland, facing Africa

TERRITORY: 979,19km² (97919ha)

CLIMATE: Mediterranean. The average annual temperature :17° degrees. Number of hours of sunshine :2600-2800. Different rainfall

Pilot experience area: The Strait of Gibraltar

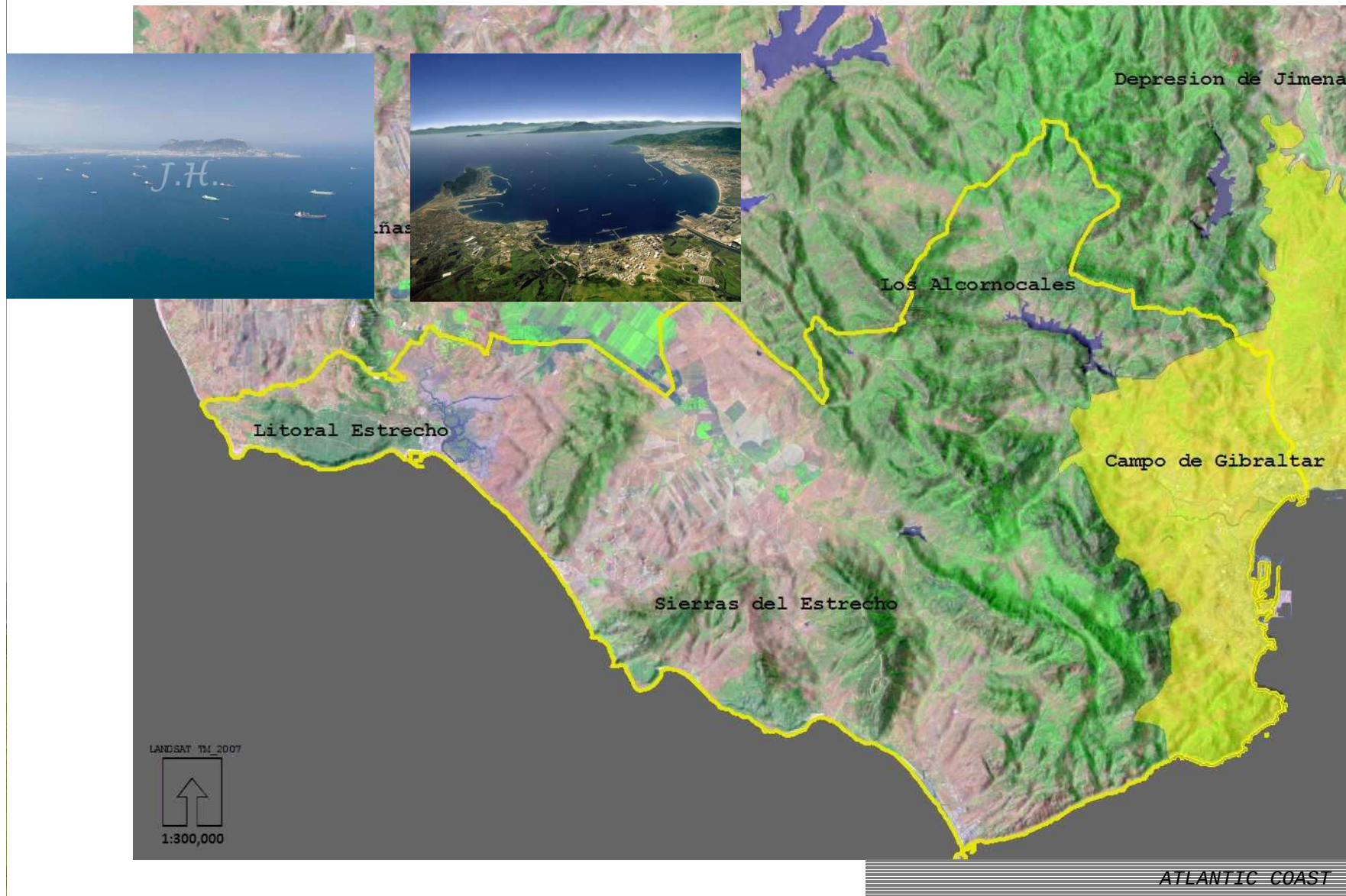
LANDSCAPE > GEOGRAPHY ASPECTS



MEDITERRANEAN COAST

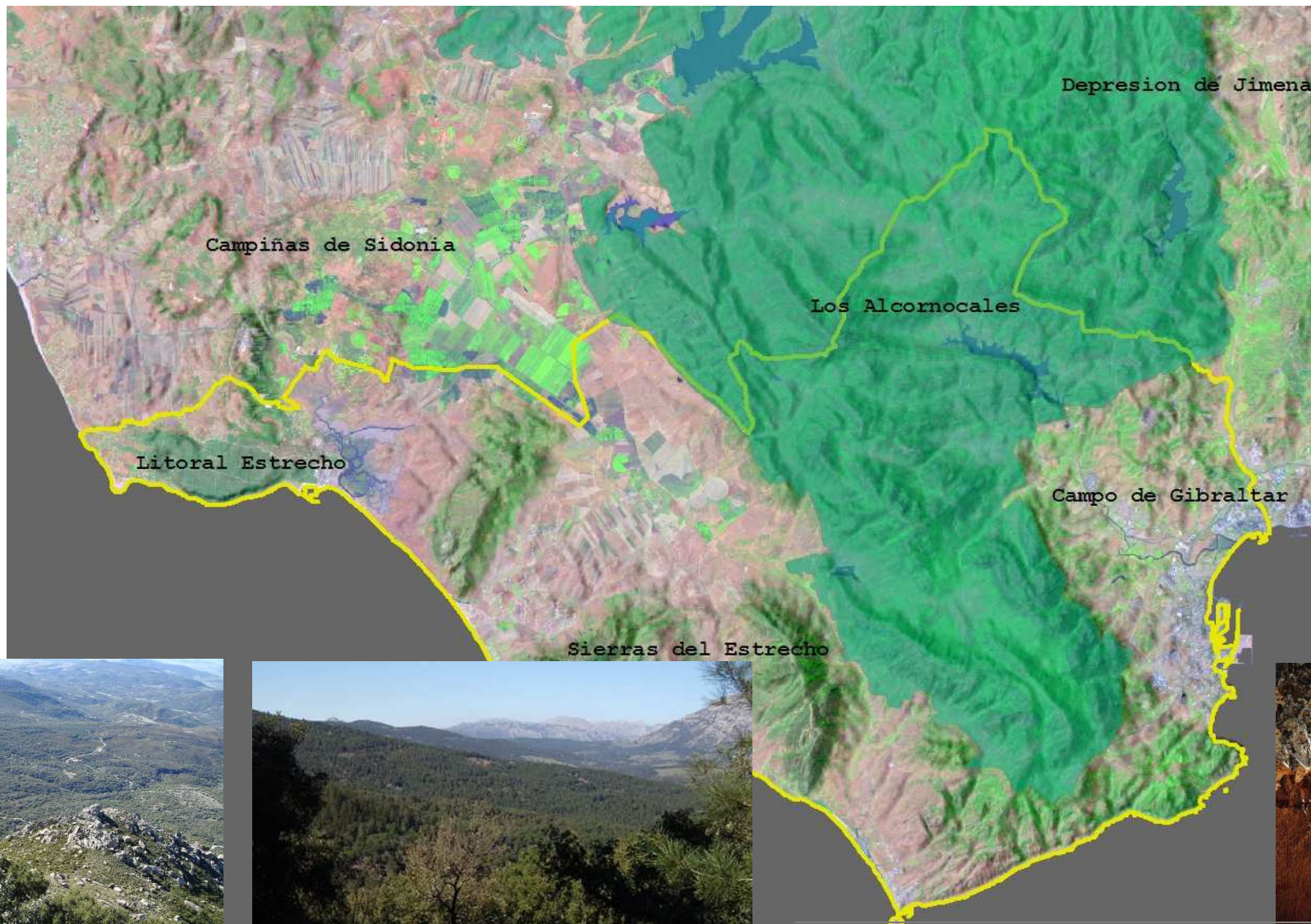
Pilot experience area: The Strait of Gibraltar

LANDSCAPE > GEOGRAPHY ASPECTS



Pilot experience area: The Strait of Gibraltar

LANDSCAPE > GEOGRAPHY ASPECTS



INLAND

Pilot experience area: The Strait of Gibraltar

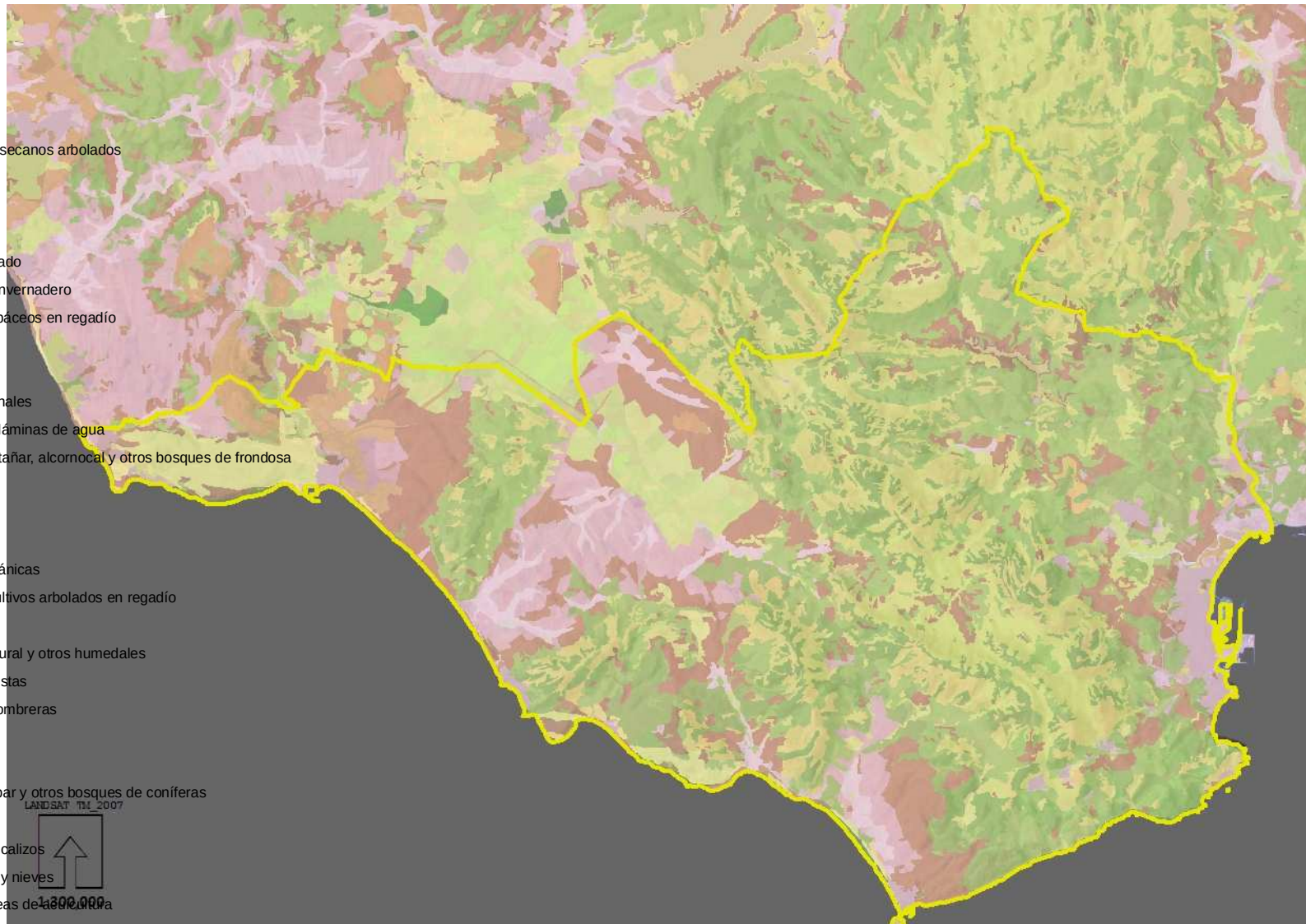
LANDSCAPE> TYPICAL PHYSIOGNOMIC UNITS

Legend

ufpaisaje

unid_fisio

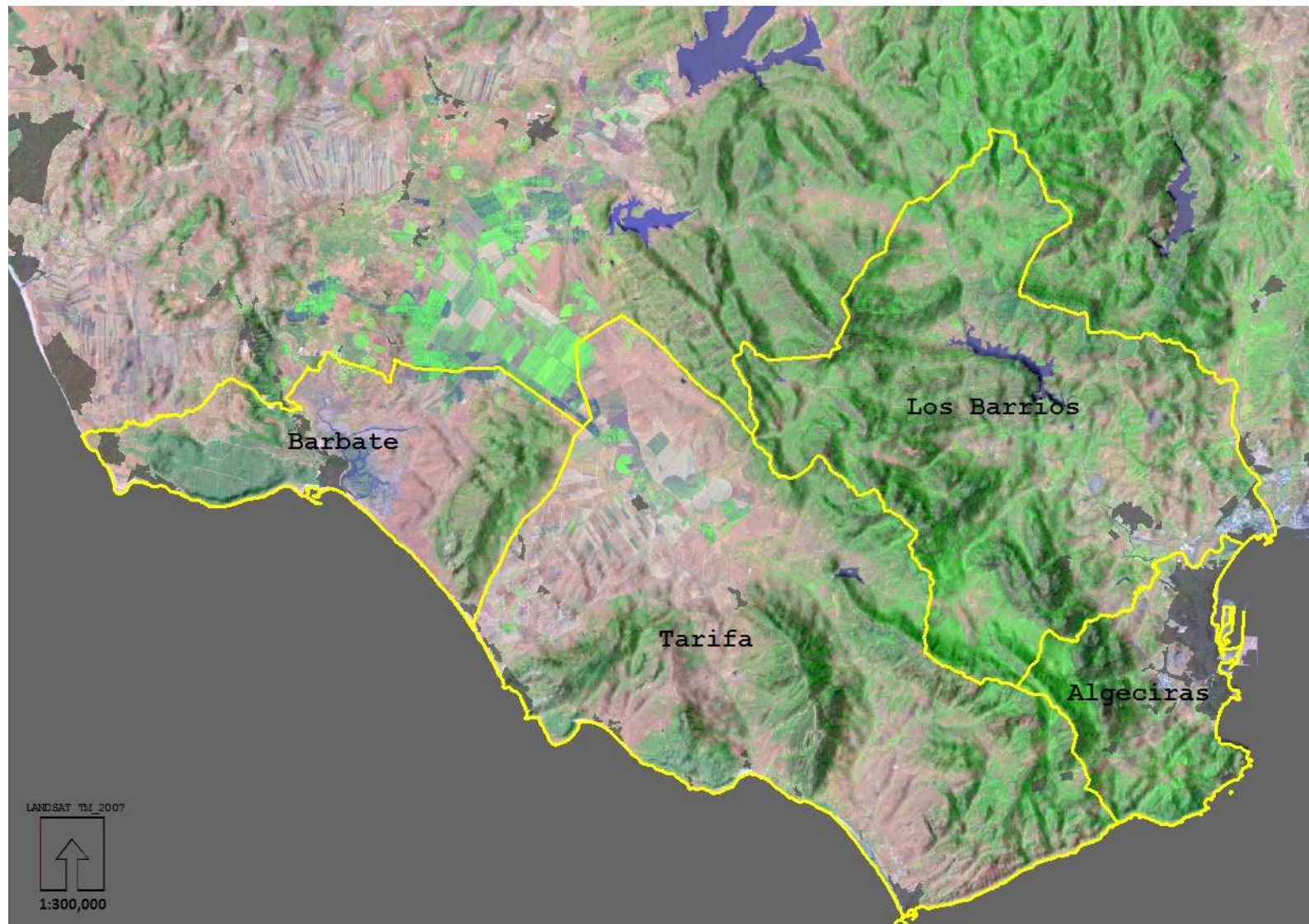
- Acantilado
- Almendral y secanos arbolados
- Arrozal
- Barranco
- Breñal
- Breñal arbolado
- Cultivos en invernadero
- Cultivos herbáceos en regadío
- Dehesa
- Delta
- Dunas y arenales
- Embalses y láminas de agua
- Encinar, castañar, alcornocal y otros bosques de frondosa
- Erial
- Espartizal
- Eucaliptal
- Formas volcánicas
- Frutales y cultivos arbolados en regadío
- Malpaís
- Marisma natural y otros humedales
- Mesas y cuevas
- Minas y escombreras
- Olivar
- Pastizal
- Pinar, pinsapar y otros bosques de coníferas
- Playa
- Roquedales calizos
- Roquedales y nieves
- Salinas y áreas de acuífera
- Tierra calma o de labor
- Urbano y periurbano
- Vega y/o llanura de inundación
- Vegetación de ribera
- Víñedo



TYPICAL PHYSIOGNOMIC UNITS: Broken ground among rocks and covered with weeds; pastures; holm oak and cork oak; wasteland; arable land; vega; urban land; sand dunes...

Pilot experience area: The Strait of Gibraltar

LANDSCAPE > SOCIO ECONOMIC ASPECTS

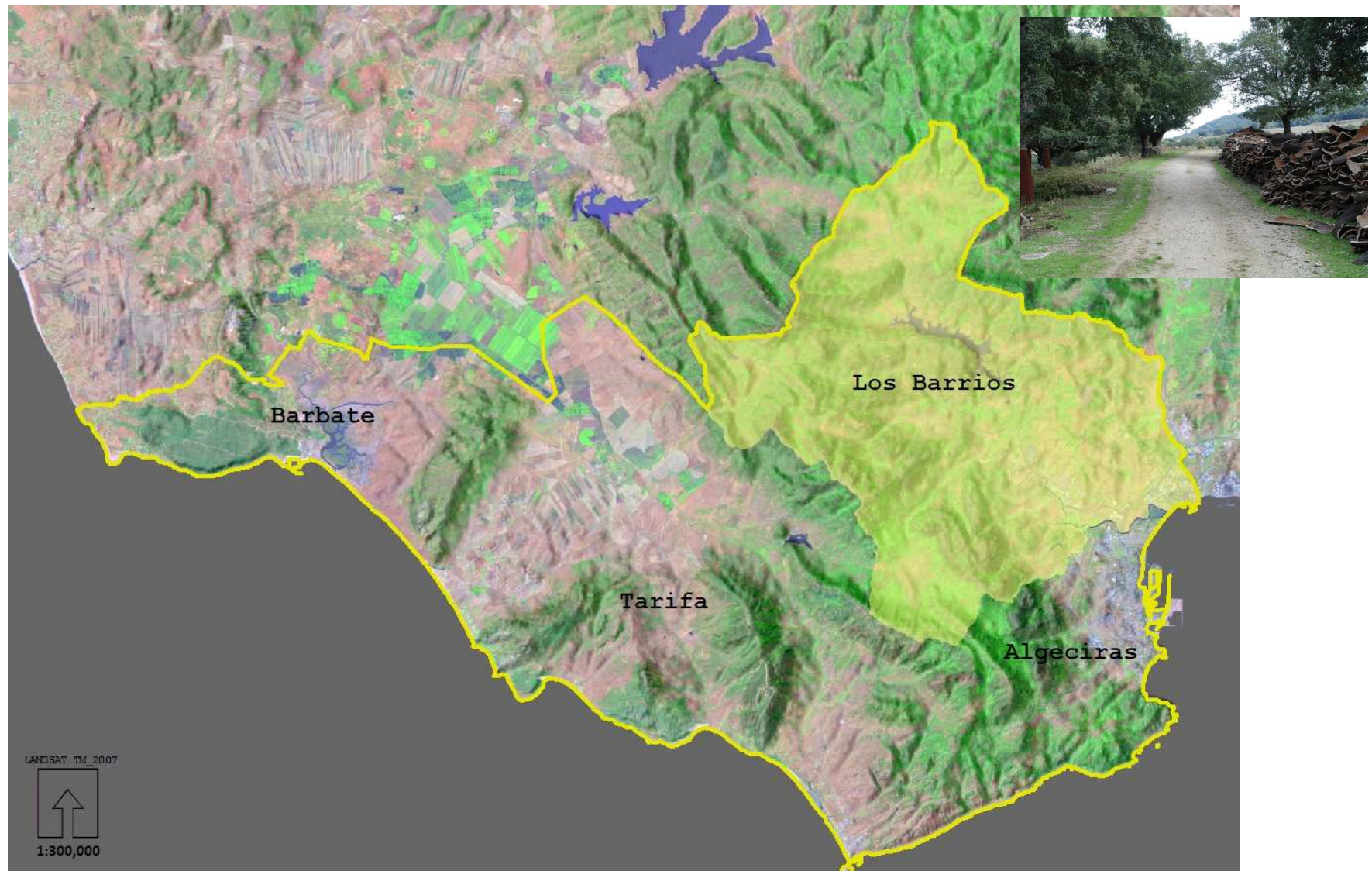


REGION Andalucía. PROVINCE: Cádiz

POPULATION (2009): BARBATE 22.912; TARIFA: 17.793; ALGECIRAS: 116.209; LOS BARRIOS: 22.311 >> TOT.:179.225 people

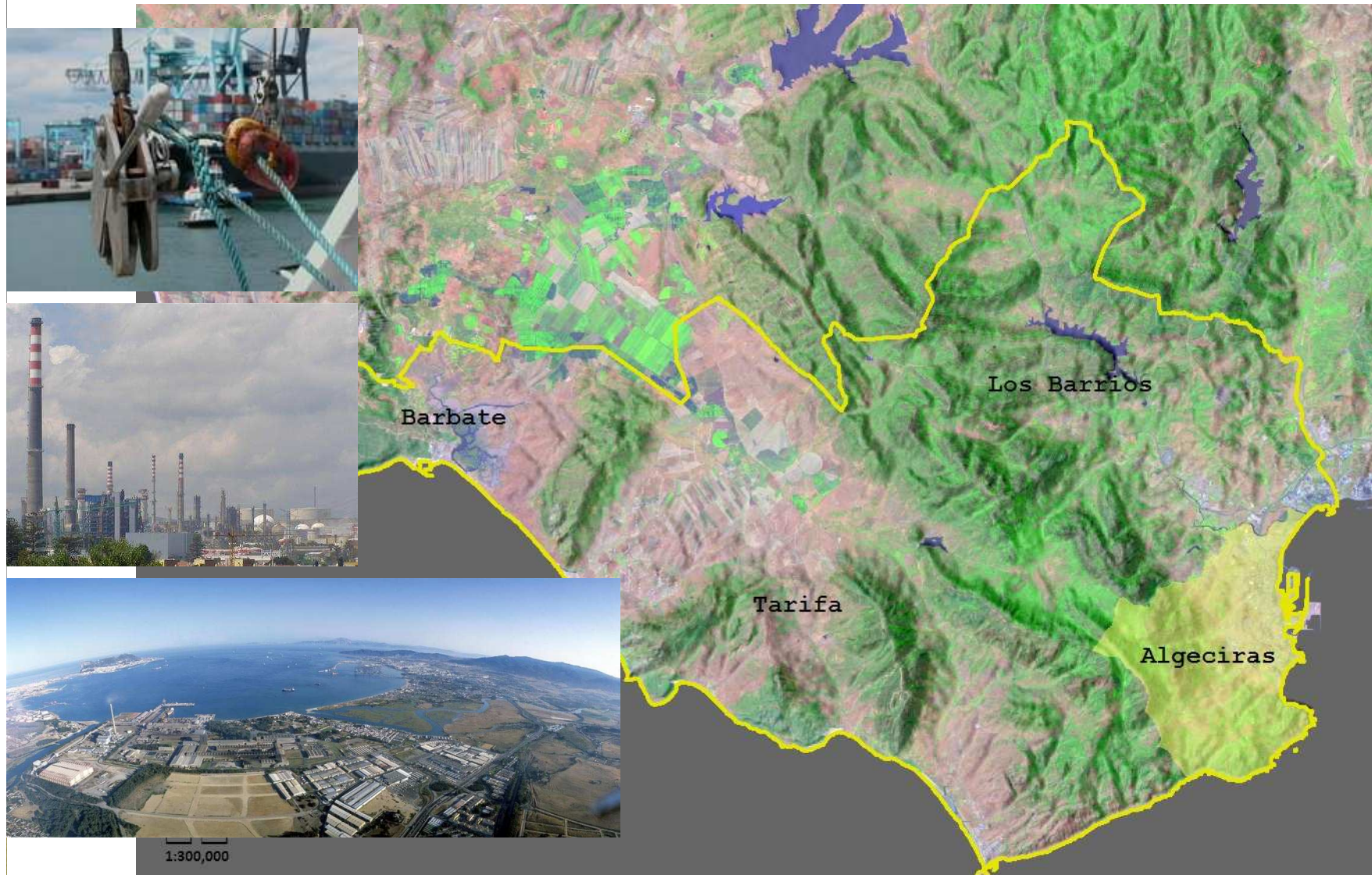
ECONOMY: traditional activities: farming, fishing, cork, crafts. New activities: hunting, RES, tourism

Pilot experience area: The Strait of Gibraltar



MUNICIPALITY OF "LOS BARRIOS":
Poor demographics evolution. Economy: cork, hunting, traditional craft. Typical landscape: dehesa

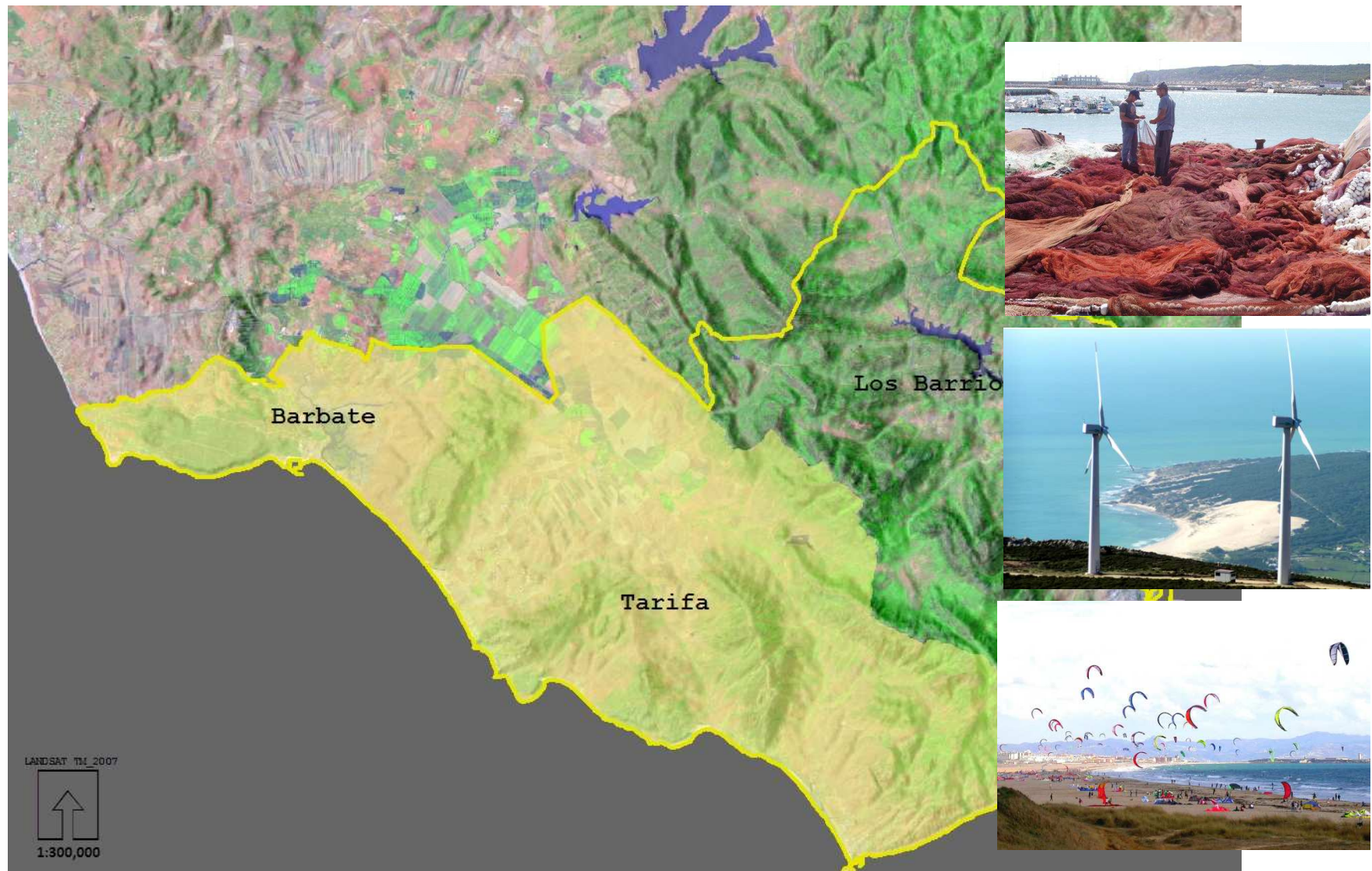
Pilot experience area: The Strait of Gibraltar



MUNICIPALITY OF "ALGECIRAS":

More stable demographic trends. Economy: comercial port and petrolquimical industry. Pollution and unemployment

Pilot experience area: The Strait of Gibraltar

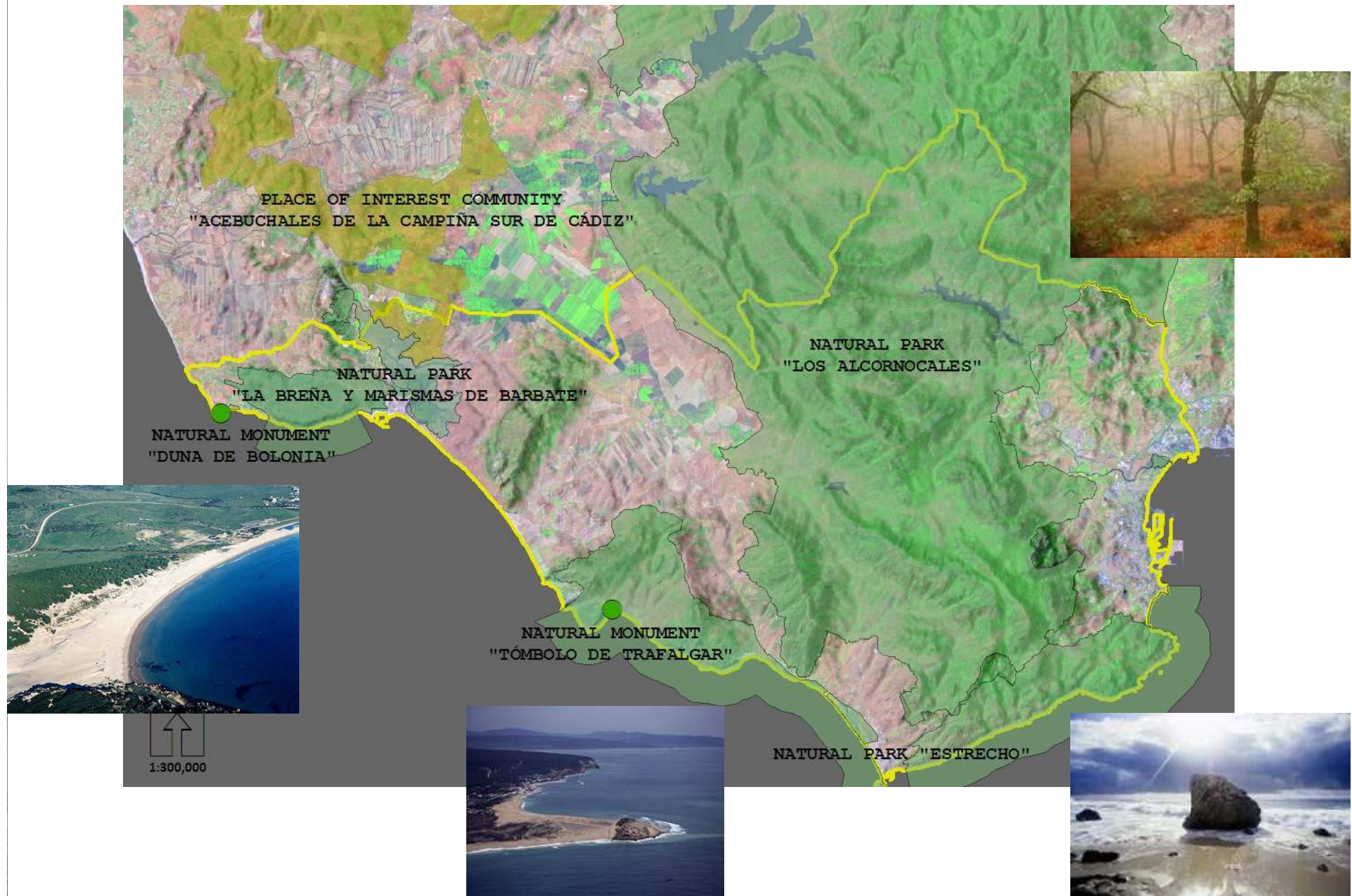


MUNICIPALITY OF "TARIFA" and "BARBATE":

Poor demographics evolution. Economy: agriculture and fishing crisis. The new emerging economic sector: tourism and wine energy production.

Pilot experience area: The Strait of Gibraltar

RESOURCES LANDSCAPE > NATURAL HERITAGE



Pilot experience area: The Strait of Gibraltar

RESOURCES LANDSCAPE> NATURAL HERITAGE> THE INTERCONTINENTAL BIOSPHERE RESERVE OF THE MEDITERRANEAN ANDALUSIA-MOROCCO

RESERVA DE LA BIOSFERA INTERCONTINENTAL DEL MEDITERRÁNEO
ANDALUCÍA (ESPAÑA) – MARRUECOS



COLECCIÓN DE 30 PANORAMAS DE 360°

Piazza en Medina de Chefchaouen
Vista en 360° desde el centro de la plaza.
Coordenadas: 35° 23' 30" N, 5° 51' 30" W.



RESERVA DE LA BIOSFERA INTERCONTINENTAL DEL MEDITERRÁNEO
ANDALUCÍA (ESPAÑA) – MARRUECOS



COLECCIÓN DE 30 PANORAMAS DE 360°

Monumento Natural de la Duna de Bolonia
Vista desde el mirador de la Duna de Bolonia.
Coordenadas: 35° 23' 30" N, 5° 51' 30" W.



RESERVA DE LA BIOSFERA INTERCONTINENTAL DEL MEDITERRÁNEO
ANDALUCÍA (ESPAÑA) – MARRUECOS



COLECCIÓN DE 30 PANORAMAS DE 360°

Estrecho de Gibraltar – Jbel Moussa – España
Vista desde el mirador de Jbel Moussa.
Coordenadas: 35° 23' 30" N, 5° 51' 30" W.



RESERVA DE LA BIOSFERA INTERCONTINENTAL DEL MEDITERRÁNEO
ANDALUCÍA (ESPAÑA) – MARRUECOS



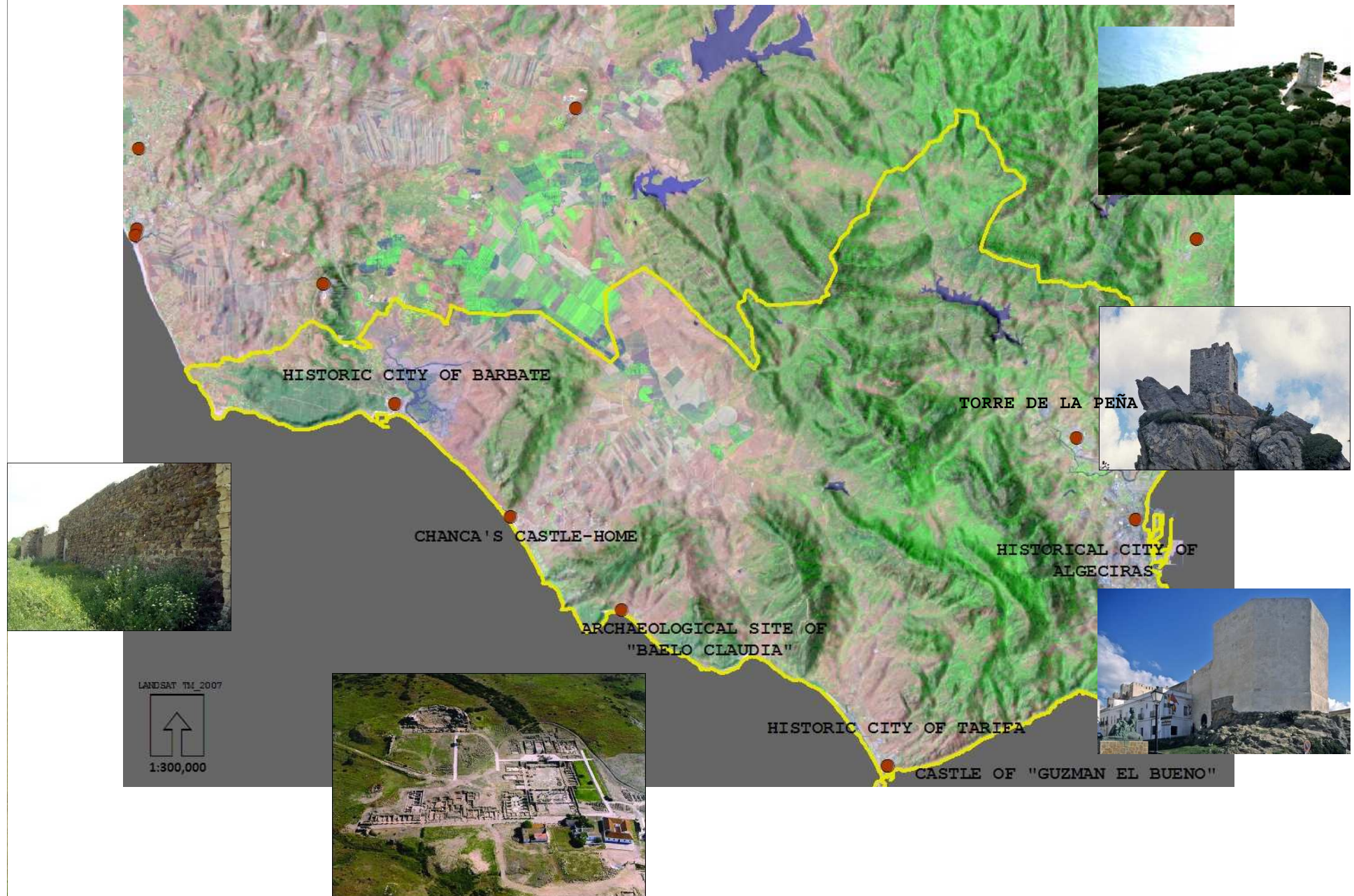
COLECCIÓN DE 30 PANORAMAS DE 360°

Bosque de Transición con Peonia
Vista desde el mirador de Jbel Moussa.
Coordenadas: 35° 23' 30" N, 5° 51' 30" W.



Pilot experience area: The Strait of Gibraltar

RESOURCES LANDSCAPE> CULTURAL HERITAGE



Pilot experience area: The Strait of Gibraltar

RESOURCES LANDSCAPE> CULTURAL HERITAGE> BAELO CLAUDIA

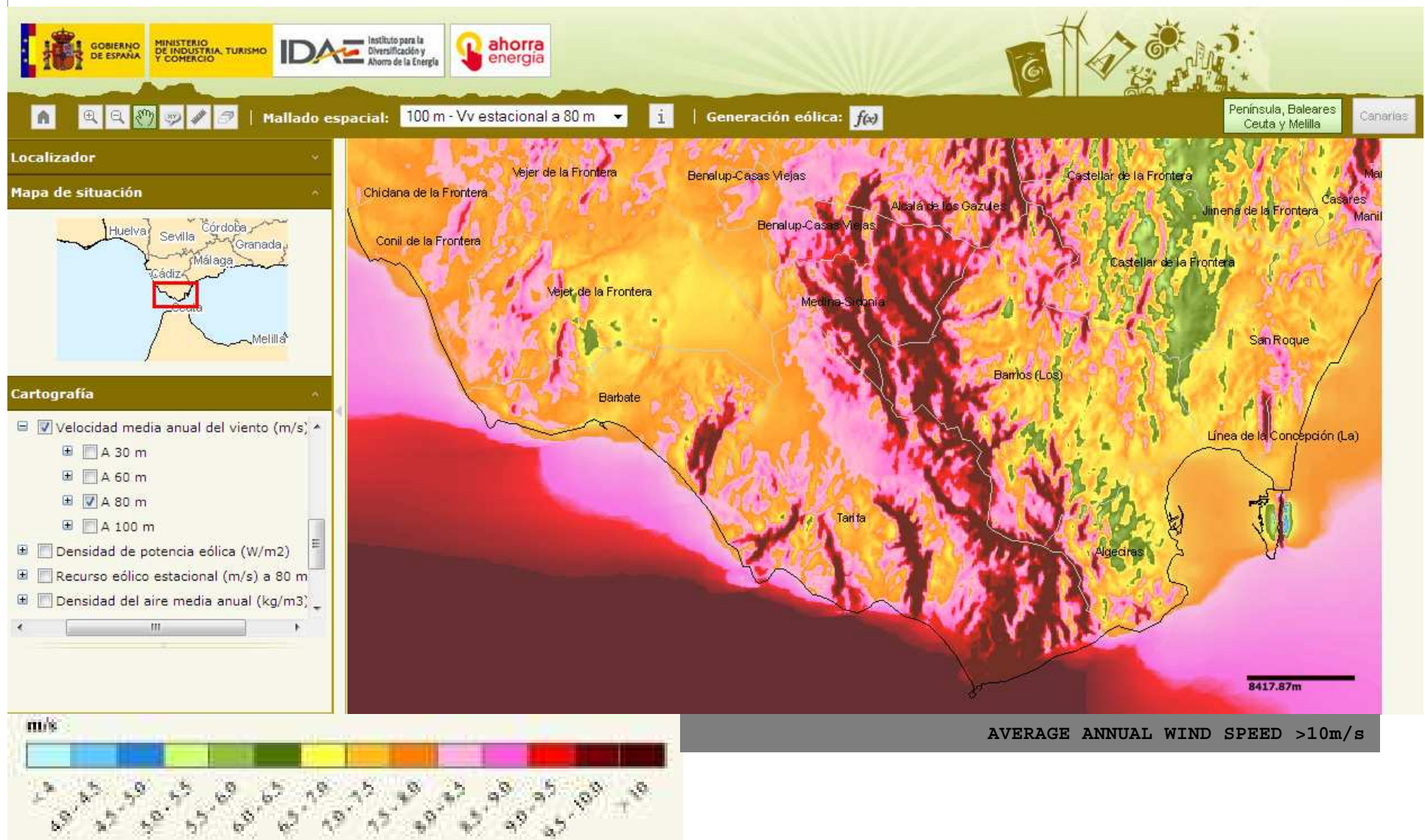
Number of the highest level of protection for
spanish heritage

TARIFA	61
LOS BARRIOS	36
ALGECIRAS	13
BARBATE	8



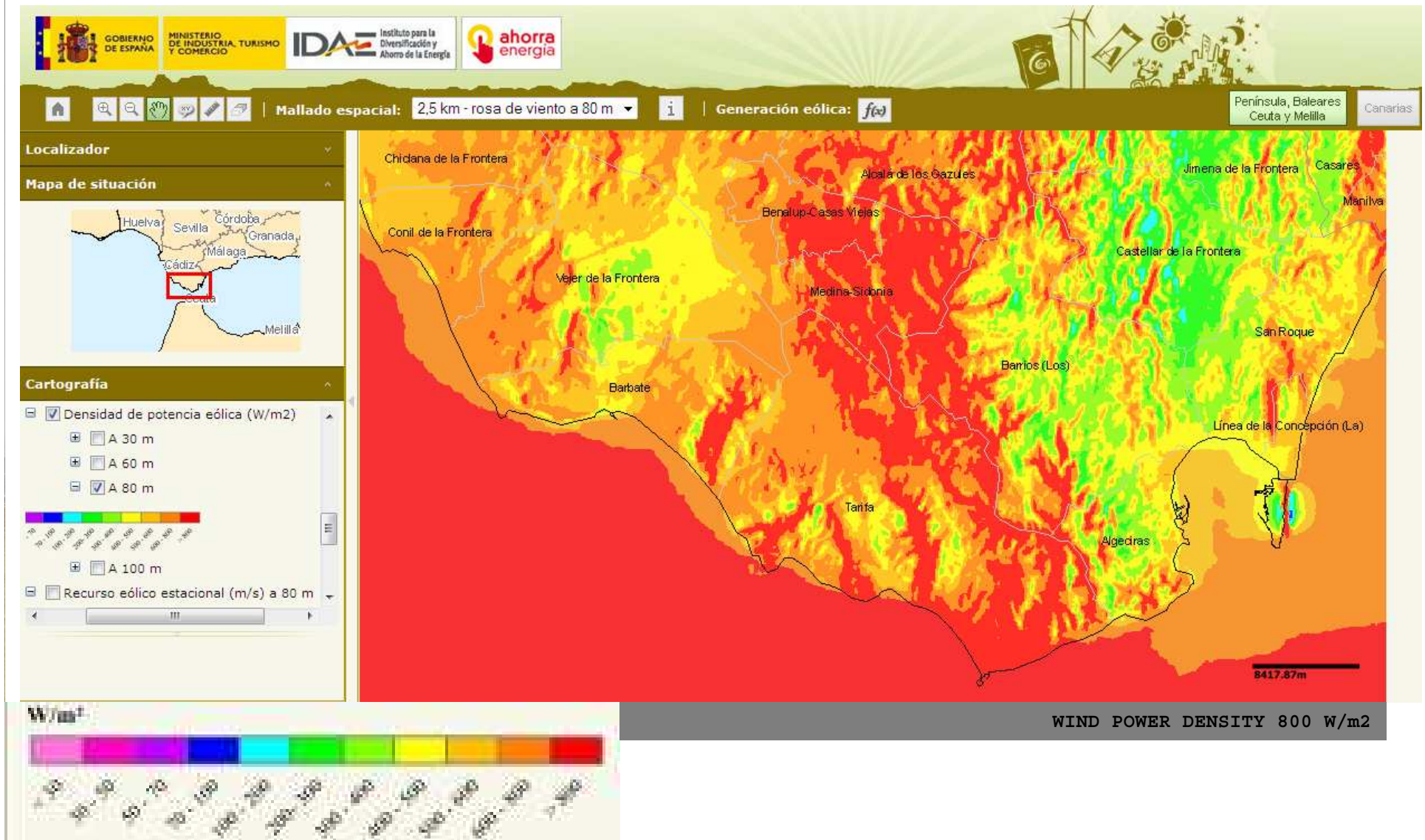
Pilot experience area: The Strait of Gibraltar

WIND POTENTIAL > Annual average wind speed at 80 m



Pilot experience area: The Strait of Gibraltar

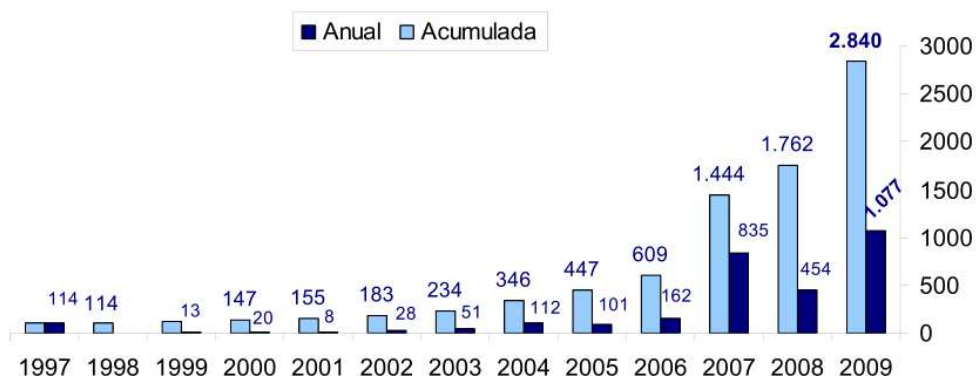
WIND POTENTIAL> Wind power density 80 m



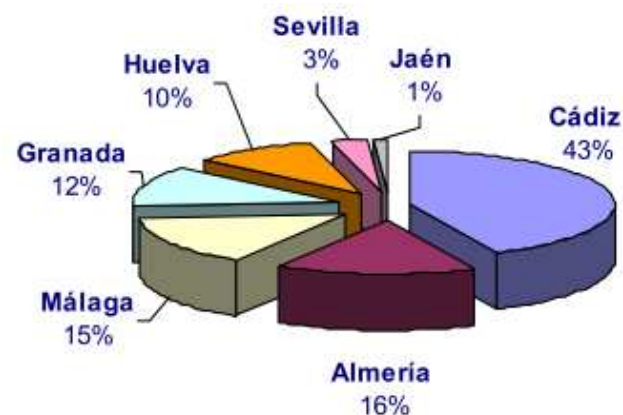
Pilot experience area: The Strait of Gibraltar

WIND POTENTIAL> ANDALUCÍA

Evolución Anual y Acumulada de la Potencia Eólica en Andalucía



CCAA	CIERRE 2008	INSTALADO 2009	CIERRE 2009	Tasa de variación
Castilla y León	3.334,04	548,68	3.882,72	16,5%
Castilla-La Mancha	3.415,61	284,00	3.699,61	8,3%
Galicia	3.140,76	91,05	3.231,81	2,9%
Andalucía	1.762,61	1.077,46	2.840,07	61,1%
Aragón	1.749,31	4,50	1.753,81	0,3%
Comunidad Valenciana	697,24	289,75	986,99	41,6%
Navarra	958,77	3,00	961,77	0,3%
Cataluña	419,44	105,10	524,54	25,1%
La Rioja	446,62	0,00	446,62	0,0%
Asturias	304,30	51,65	355,95	17,0%
País Vasco	152,77	0,00	152,77	0,0%
Murcia	152,31	0,00	152,31	0,0%
Canarias	134,09	4,25	138,34	3,2%
Cantabria	17,85	0,00	17,85	0,0%
Baleares	3,65	0,00	3,65	0,0%
Total	16.689,37	2.459,44	19.148,81	14,7%



Total wind parks 1.238. 63 are in the province of Cadiz

Pilot experience area: The Strait of Gibraltar

WIND POTENTIAL > PILOT AREA

LOS BARRIOS

Wind farm	Power (mw)
Pino (El)	24,60

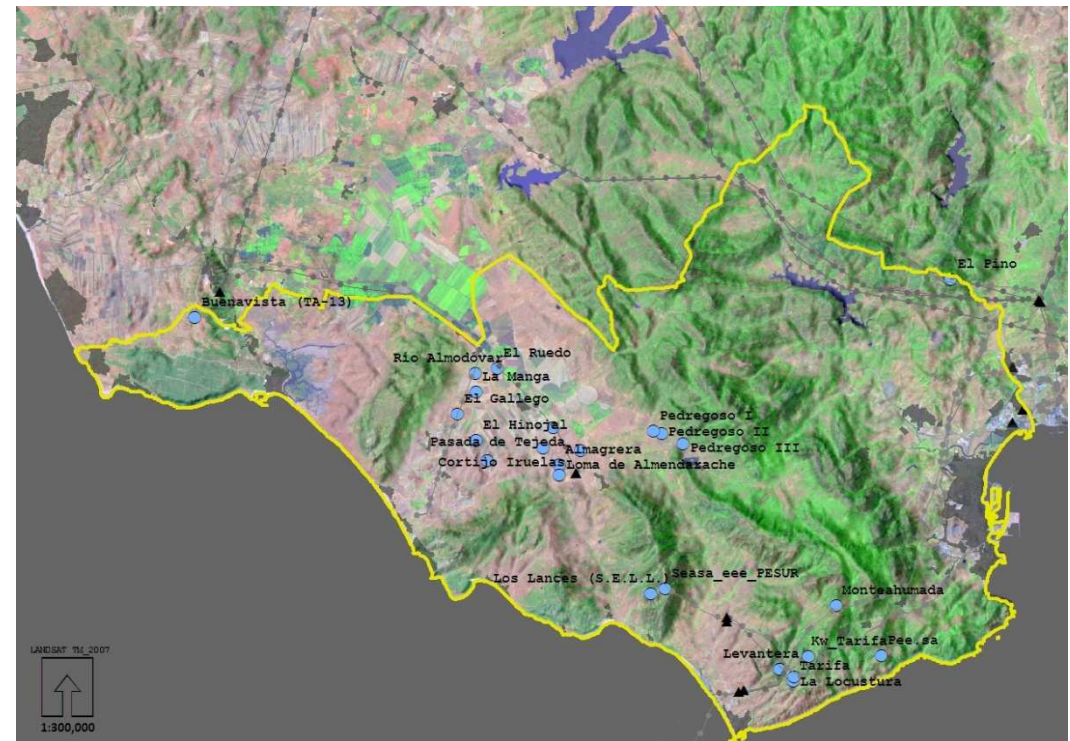
BARBATE

Wind farm	Power (mw)
Buenavista (TA-13)	7,80

TARIFA

Wind farm	Power (mw)	Wind farm	Power (mw)
kW_Tarifa	29,70	Hinojal (El)	0,66
Herrería (La)	46,76	Loma de los Aviadores	6,00
Pasada de Tejeda	10,02	Puerto Facinas	12,00
Levantera	0,65	Risa (La)	12,00
Tarifa	1,48	Tahivilla (TA-1)	30,00
Cortijo Iruelas	13,60	Pee.sa	6,00
Gallego (El)	24,00	Almendarache	21,00
Manga (La)	12,00	Tahuna (La)	20,00
Monteahumada	3,05	Zorreras (Las)	20,00
Pandero (El)	20,00	Bancal (El)	18,00
Río Almodóvar	12,80	Siglos (Los)	20,80
Ruedo (El)	16,00	Seasa_eee_PESUR	30,48
Torre I (La)	16,00	Lances S.E.L.L. (Los)	10,68
Hinojal I	14,00	Pedregoso A	14,85
Hinojal II	8,00	Pedregoso B	14,85
Zarzuela II	16,00	Pedregoso D	14,85

TOTAL: 34 wind farm, 528.63 MW



The area for the pilot project :

- Varied landscape
- Dynamism to the RES
- process of replacing old aerogenerator



If you are interested in the information contained in this power point:

<http://www.juntadeandalucia.es/medioambiente/site/web/rediam/>



PILOT EXPERIENCE AREA

THANKS

Vercelli, 28-29 october 2010, 1st 2010