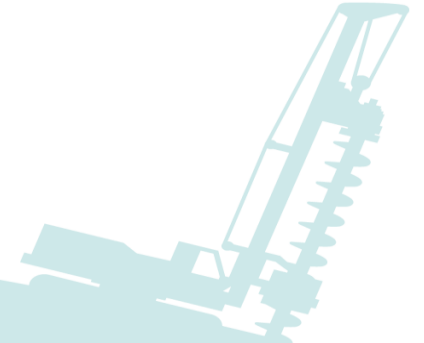




POSIDON
POLLUTED SITE DECONTAMINATION PCP



Contaminated sites in the Basque Country and the support for *in situ* soil remediation technologies

Alexander Boto
General Manager, Ihobe

40
1983-2023



Bilbao, 9 October 2023

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OUR STORY



POSIDON
POLLUTED SITE DECONTAMINATION PCP

Major milestones of the anti-contamination soil protection policy in the Basque Country

1994

Basque Soil Protection Master Plan

OBJECTIVE

Protect **human health** along with the integrity and proper functioning of **ecosystems**.

- Avoid hazardous human exposure situations
- Protect the quality of surface and underground water
- Protect ecosystems and their functioning
- Facilitate the urban regeneration process without mortgaging future generations
- Prevent the future appearance of new alterations to soil quality

1998

Publication of the first **methodological guides**.

Incorporation of **CHAPTER III on Soil Protection** and **CHAPTER IV on Contaminated Sites** in the Basque General Environmental Protection Act 3/98. **Contaminated sites**.

2001

First publication of the Inventory of sites that withstand or have withstood potentially soil contaminating activities or facilities.

2002

Basque Sustainable Development Environmental Strategy 2002-2020.

2005

Act 1/2005, of 4 February, on the **prevention and correction of soil contamination**

Royal Decree 9/2005, of 14 January, establishing the list of potentially soil contaminating activities and the criteria and standards for the declaration of contaminated sites.

2006

Decree 199/2006, of 10 October, establishing the accreditation system for soil quality appraisal and restoration entities and determining the content and scope of the soil quality appraisals to be carried out by such entities.

2023

Basque Soil Protection Strategy 2030

2020

BASQUE ENVIRONMENTAL PROFILE 2020 IN RELATION TO SOIL CONTAMINATION

2019

DECREE 209/2019, of 26 December, enacting Act 4/2015, of 25 June, on the prevention and correction of soil contamination.

2015

Act 4/2015, of 25 June, on the prevention and correction of soil contamination.

2014

Basque Environmental Framework Programme 2020.

2008

Decree 165/2008, of 30 September, on the inventory of sites that withstand or have withstood potentially soil contaminating activities or facilities.

2007

Contaminated site plan for the Basque Country 2007-2012

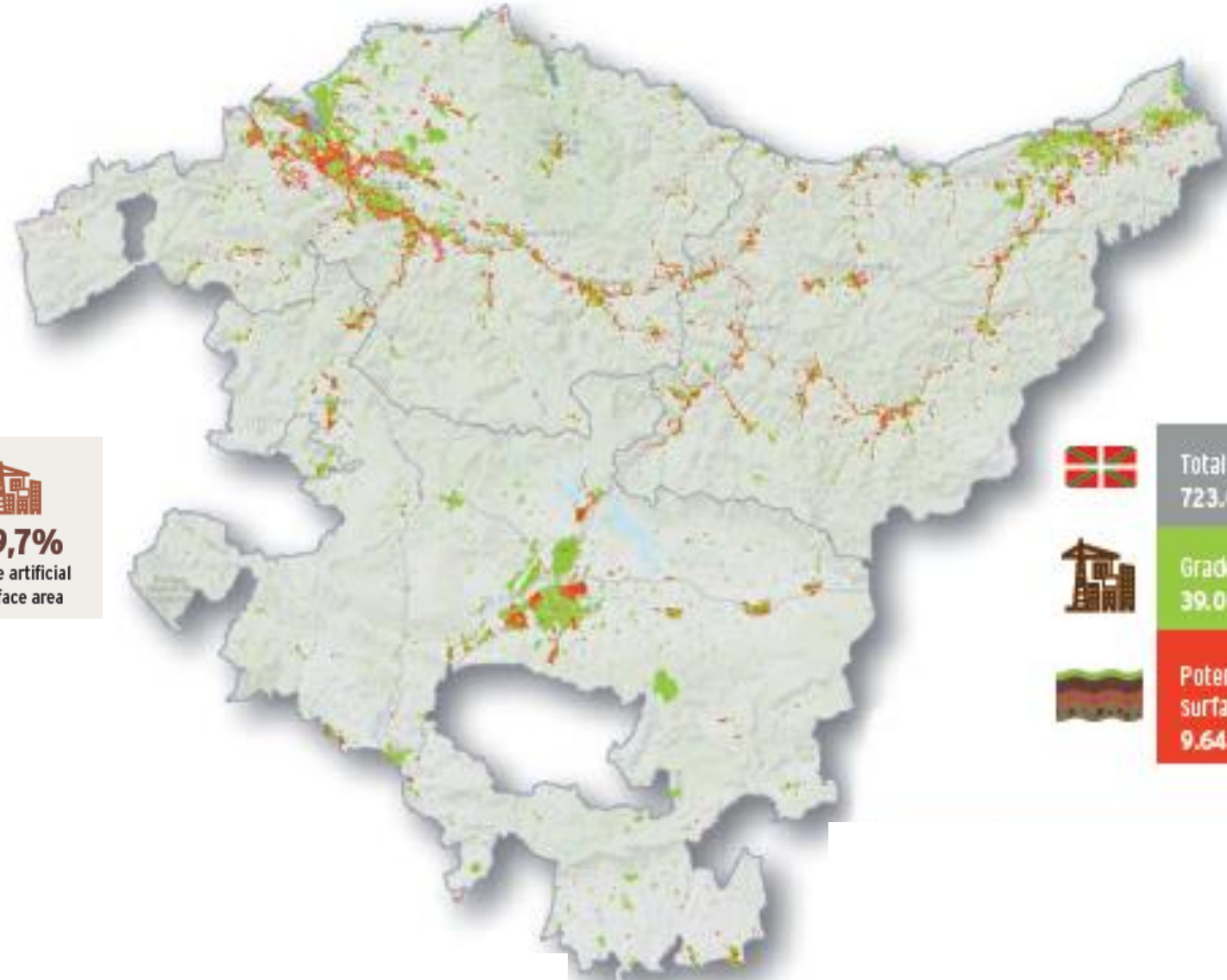
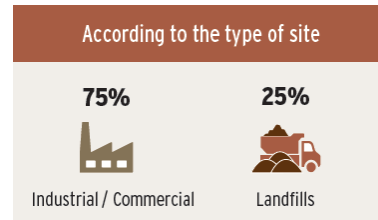
OBJECTIVES

- **PREVENT** the alteration of soil quality, using the driving force attributed by Act 1/2005.
- Foster the rational **RESTORATION** of contaminated sites.
- **REUSE** vacant sites whose soil quality has been altered to locate potentially contaminating activities.
- **ENHANCE** sites by allocating them new non-contaminating uses with high added value.

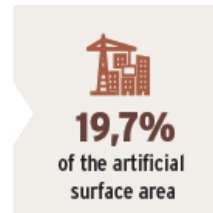
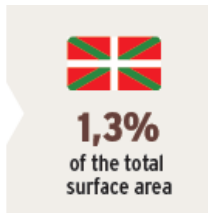


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Potentially contaminated sites



Potentially contaminated sites in the Basque Country account for:



Total surface area:
723.000 ha



Graded surface area:
39.000 ha



Potentially contaminated surface area:
9.642 ha



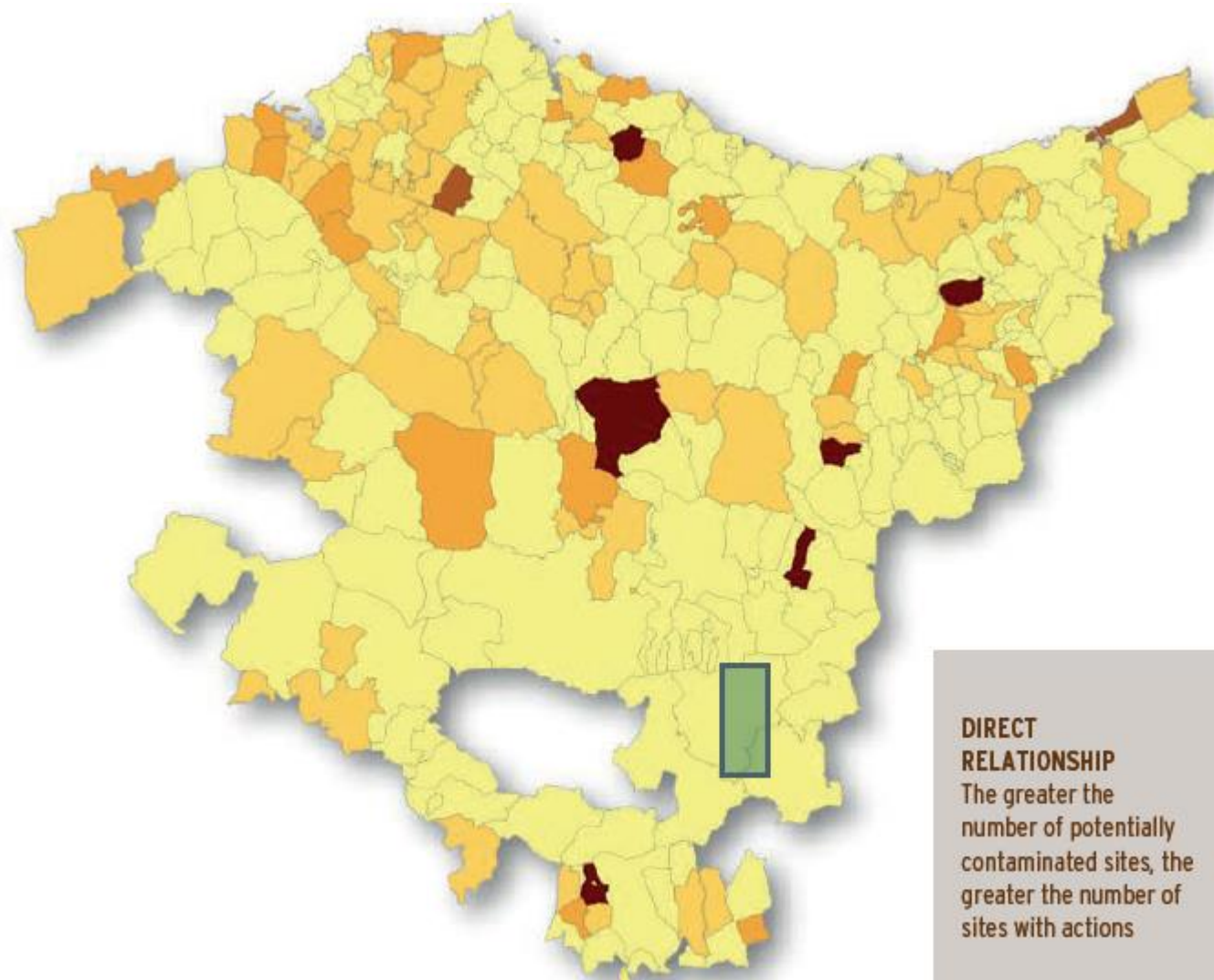
Percentage of sites in the municipality in which actions have been implemented:



BASQUE COUNTRY

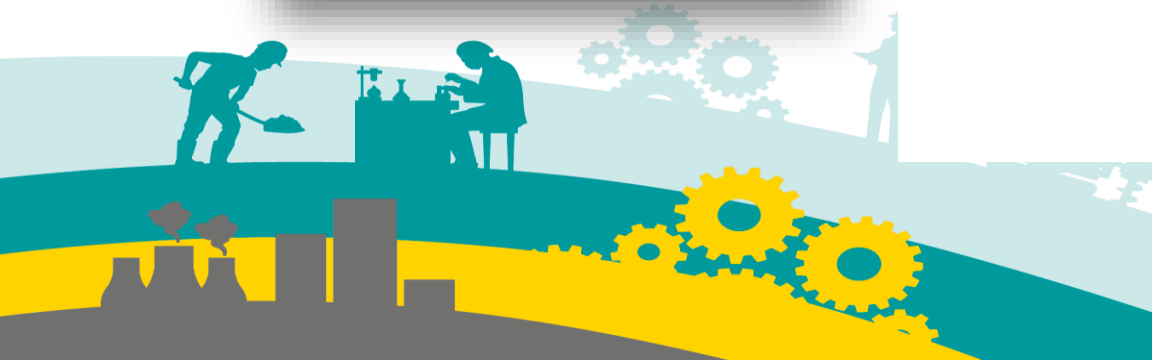
20%

of the potentially contaminated sites have returned to the market once actions were taken to guarantee their quality.

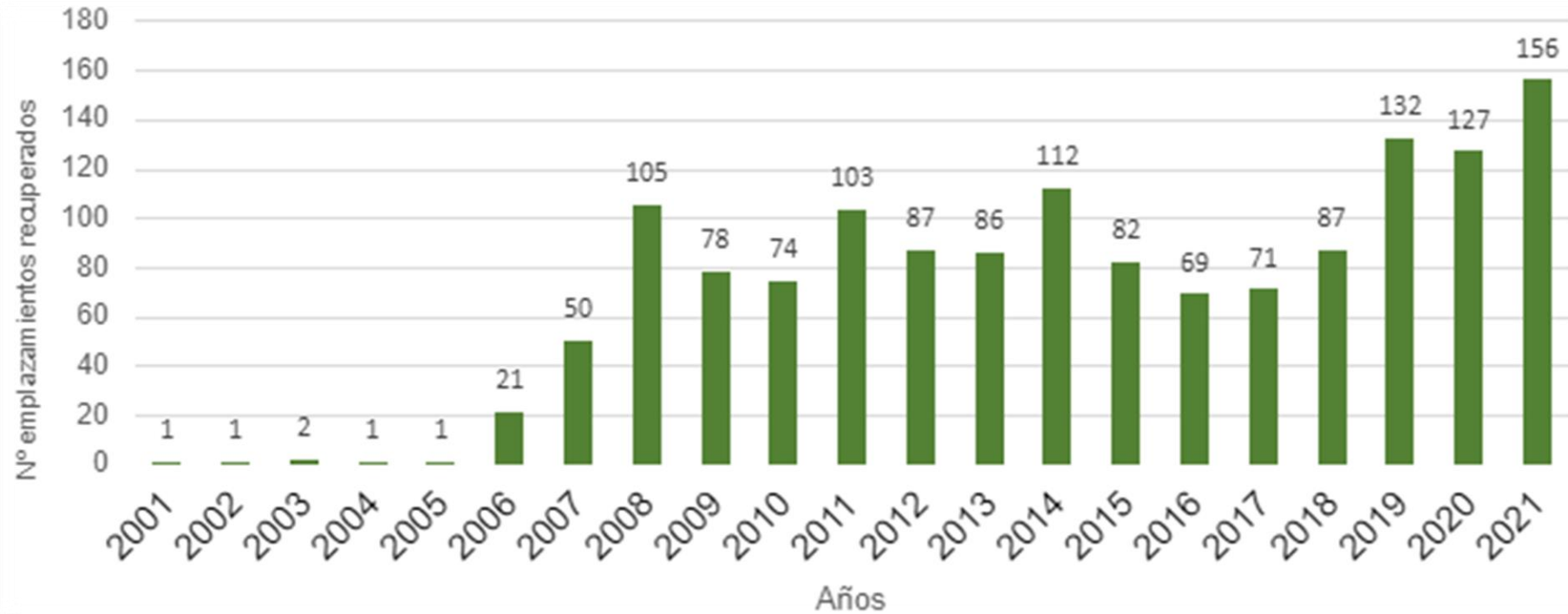


DIRECT RELATIONSHIP

The greater the number of potentially contaminated sites, the greater the number of sites with actions



Remediated sites



Año	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Nº de emplazamientos recuperados	1	1	2	1	1	21	50	105	78	74	103	87	86	112	82	69	71	87	132	127	156	1.446
Superficie recuperada (Ha)	40	12	5	19	3	41	33	80	34	131	150	87	123	87	74	49	88	77	58	44	147	1.382

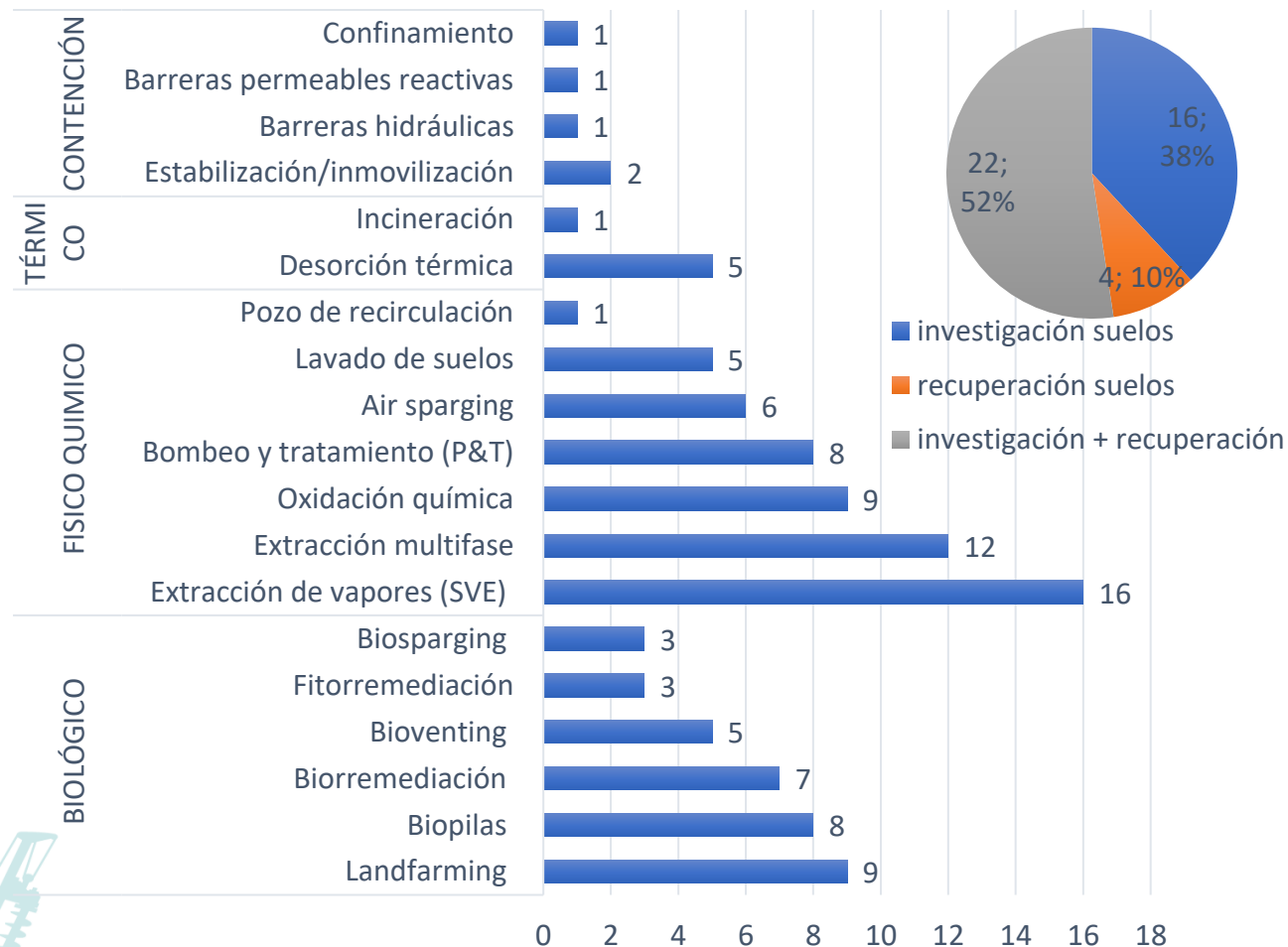


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NEW SCENARIO

- Decreasing number of landfills
- Approval of a tax on waste dumping
- Increasing demands by the administration on compulsory studies of clean-up alternatives
- Increasing number of accredited entities on soil different technologies for soil remediation
- Different projects to support innovative technologies

42 organizations



www.posidonproject.eu
info@posidonproject.eu



Autorità di Sistema Portuale
del Mare Adriatico Orientale
Porti di Trieste e Monfalcone



Centro de Estudios Ambientales
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MEMBER OF BASQUE RESEARCH
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