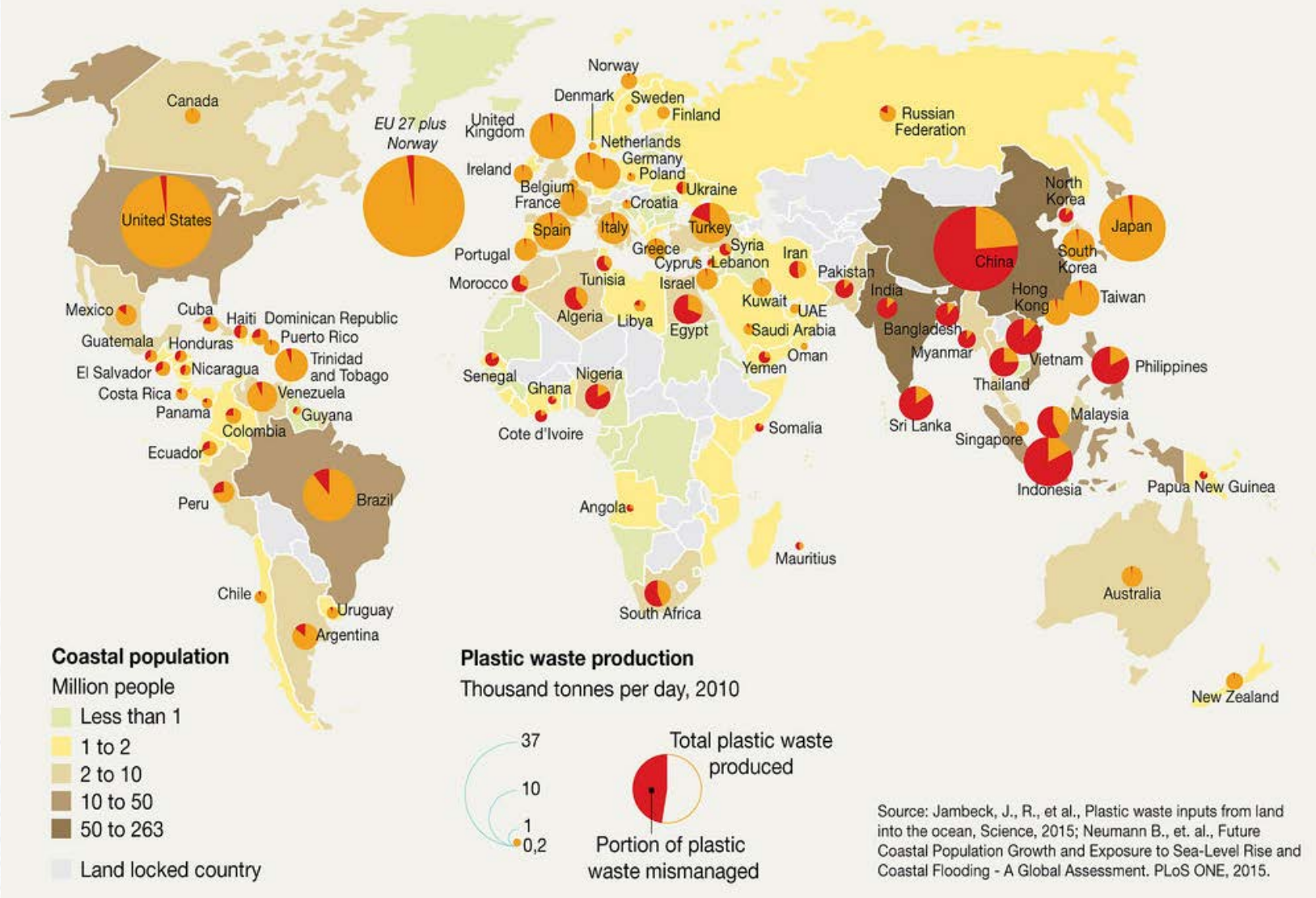


Les déchets marins

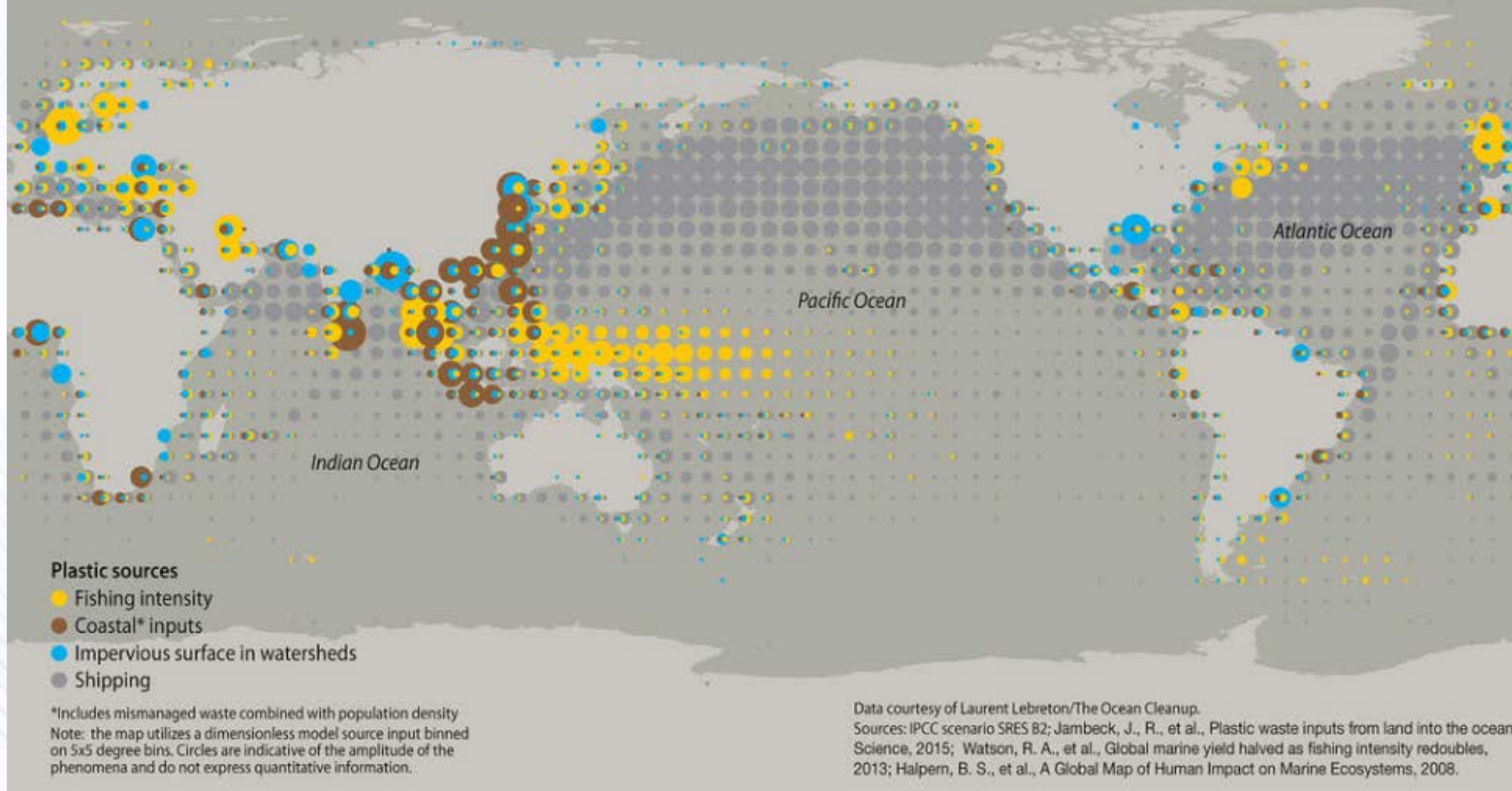


Plastic waste produced and mismanaged



Marine Litter Vital Graphics

Plastic input into the oceans

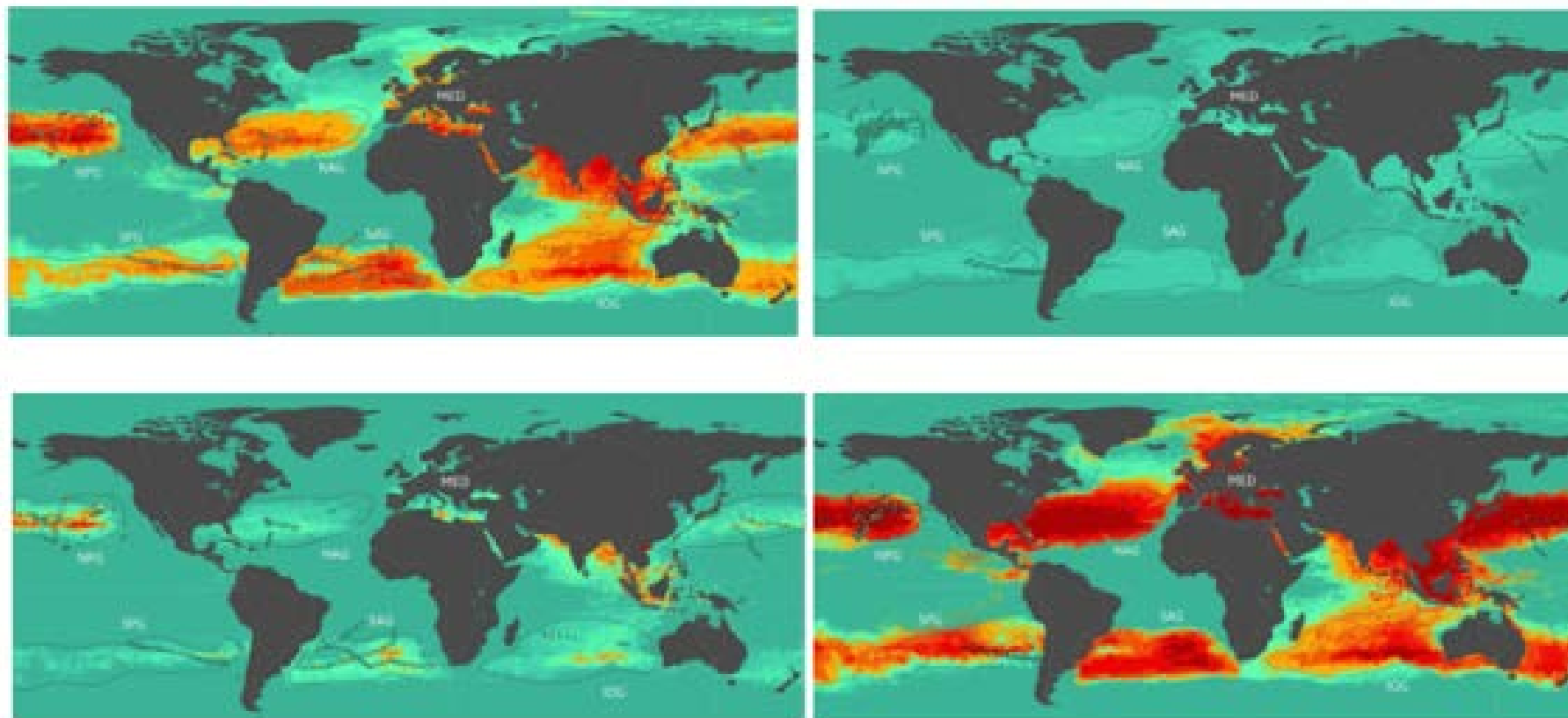


Country	Coastal population ²	Waste generation rate [kg/person/day] ³	Plastic waste generation [kg/day] ⁷	Plastic waste littered [kg/day] ⁷
Belgium	4 747 957	1,33	375 730	7 515
Bulgaria	1 002 695	1,28	153 372	3 067
Cyprus	840 556	2,07	207 924	4 158
Denmark	5 376 386	2,34	245 324	4 906
Estonia	878 021	1,47	154 238	3 085
Finland	2 927 674	2,13	682 836	13 657
France	17 287 280	1,92	3 302 562	66 051
Germany	8 837 035	2,11	4 279 290	85 586
Greece	9 794 702	2	1 949 146	38 983
Iceland	292 708	1,56	81 964	1 639
Ireland	3 749 576	3,58	1 604 106	32 082
Italy	33 822 532	2,23	4 487 743	89 755
Latvia	1 432 078	1,03	176 267	3 525
Lithuania	443 894	1,1	58 350	1 167
Malta	404 707	1,78	86 085	1 722
Netherlands	8 971 770	2,12	3 794 520	75 890
Poland	3 272 933	0,88	315 380	6 308
Portugal	8 507 951	2,21	2 246 907	44 938
Romania	875 170	1,04	35 952	719
Slovenia	336 594	1,21	48 670	973
Spain	22 771 488	2,13	6 281 173	125 623
Sweden	6 202 234	1,61	294 575	5 892

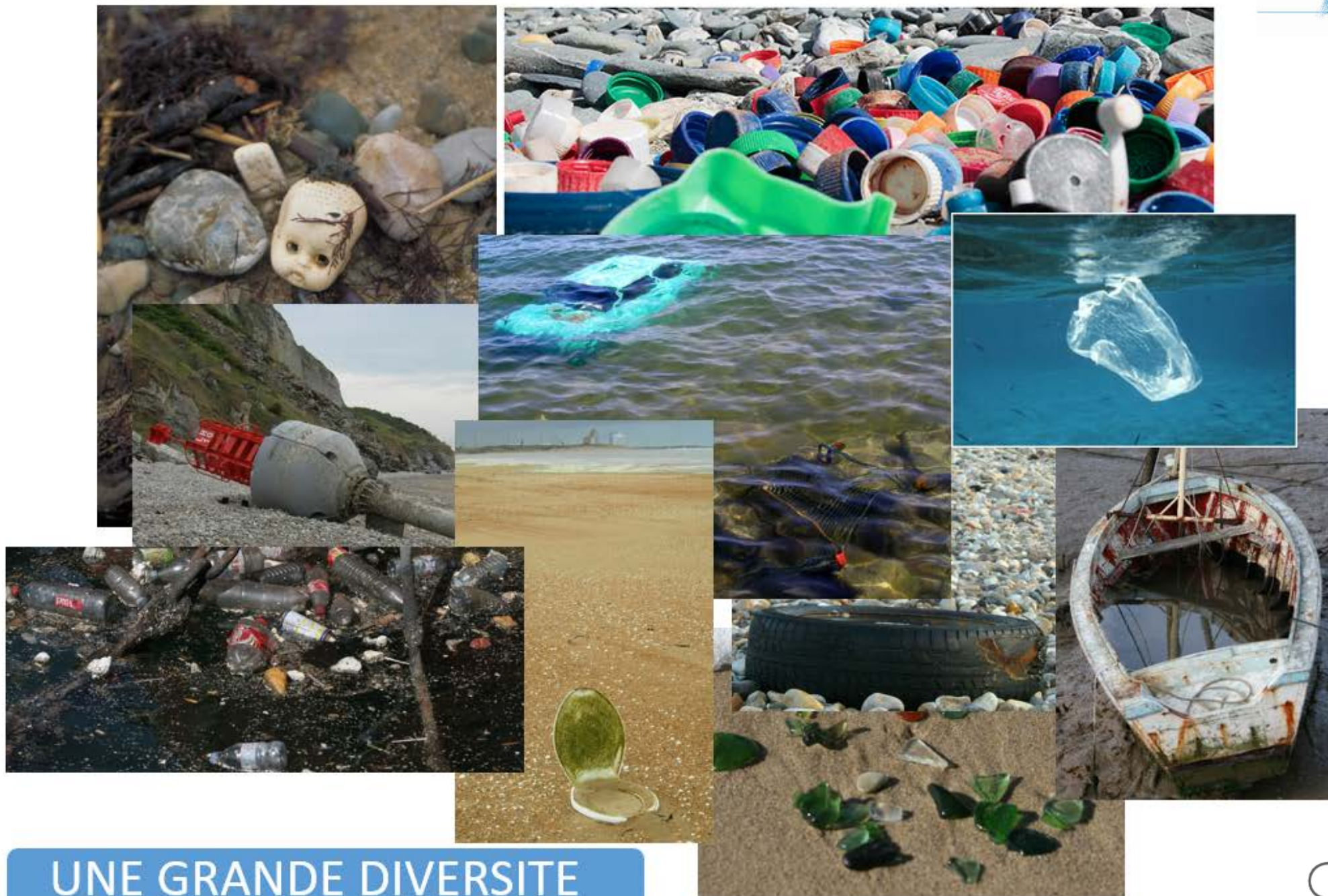
Total Europe : 617,2 tonnes / jour, 225 000 tonnes/ An

Quelle situation en Europe?

Production de plastique: # 350 M tons en 2018

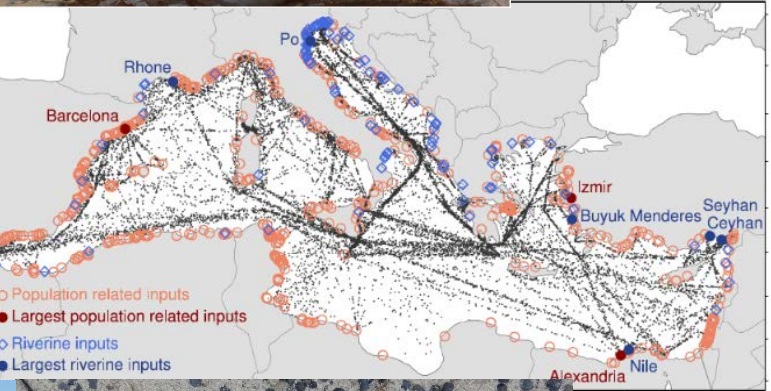


8 M tons entrent dans les océans chaque année



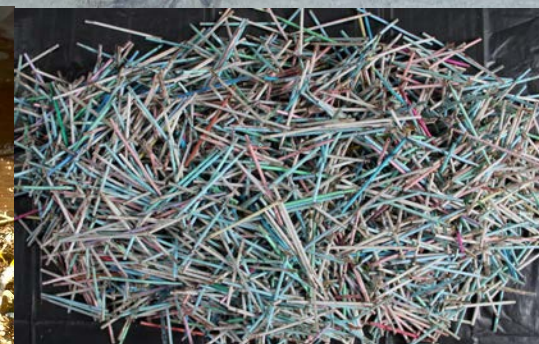
UNE GRANDE DIVERSITE

Sources très variées: fleuves, navires, peche, tourisme, eaux usées, évènements extremes, atmosphere, individus, etc.

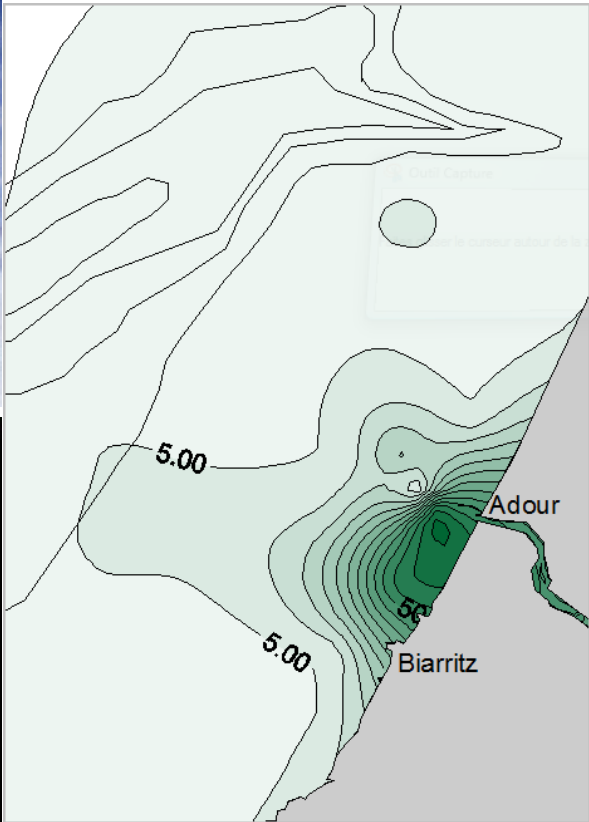
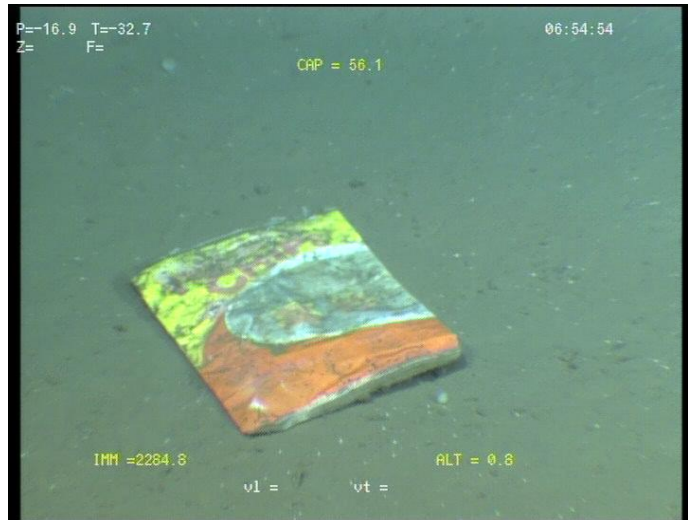
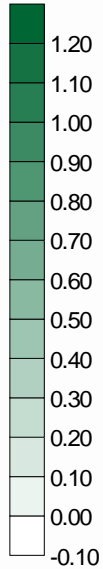
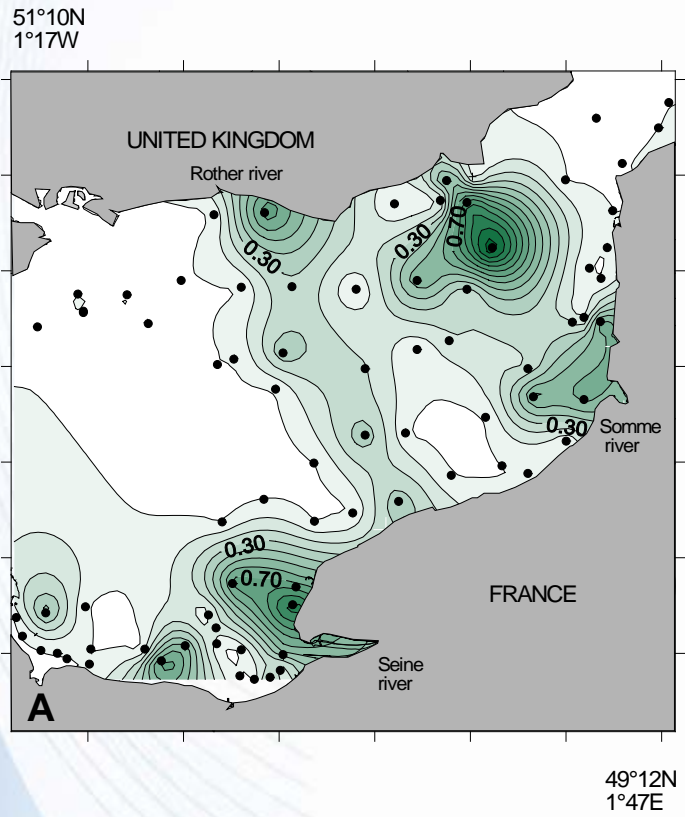


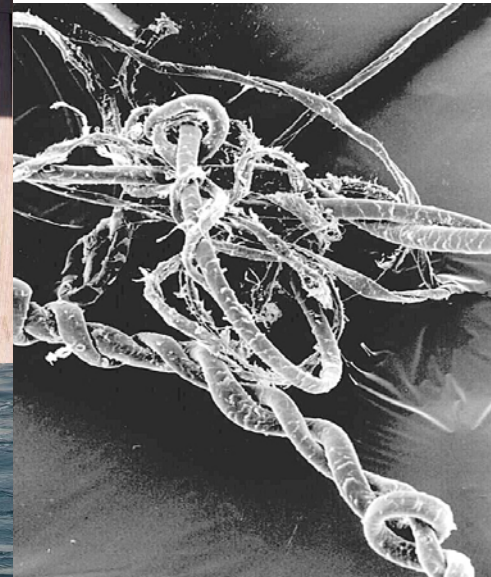
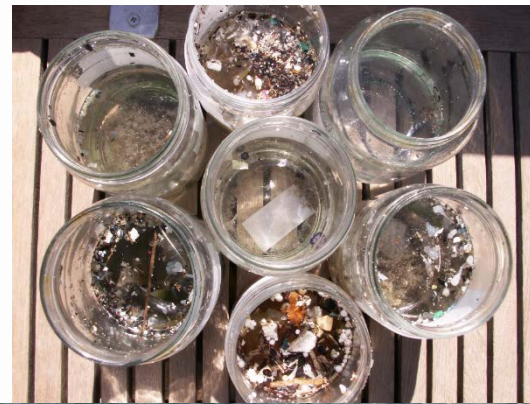
30°E

Accumulation sur les plages, en mer et sur les fonds

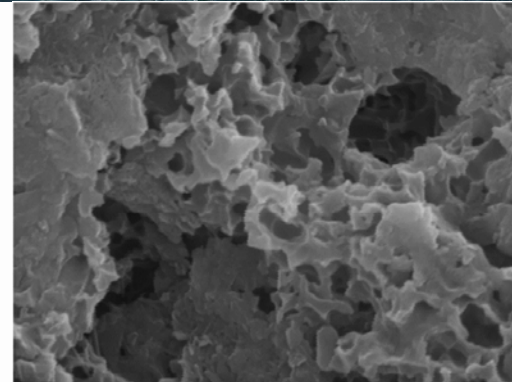


Des zones sensibles, des zones d'accumulation



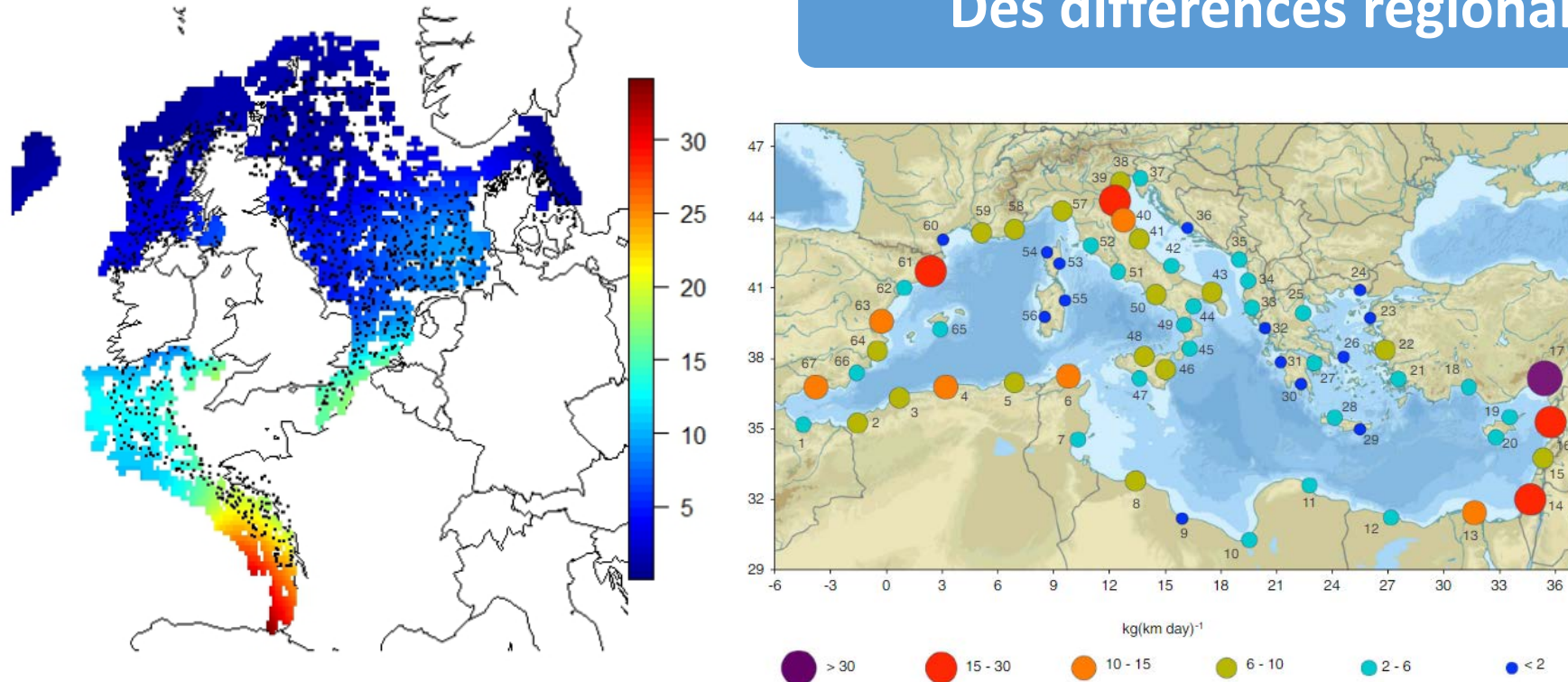


- jusqu'à 64 millions Items/km²



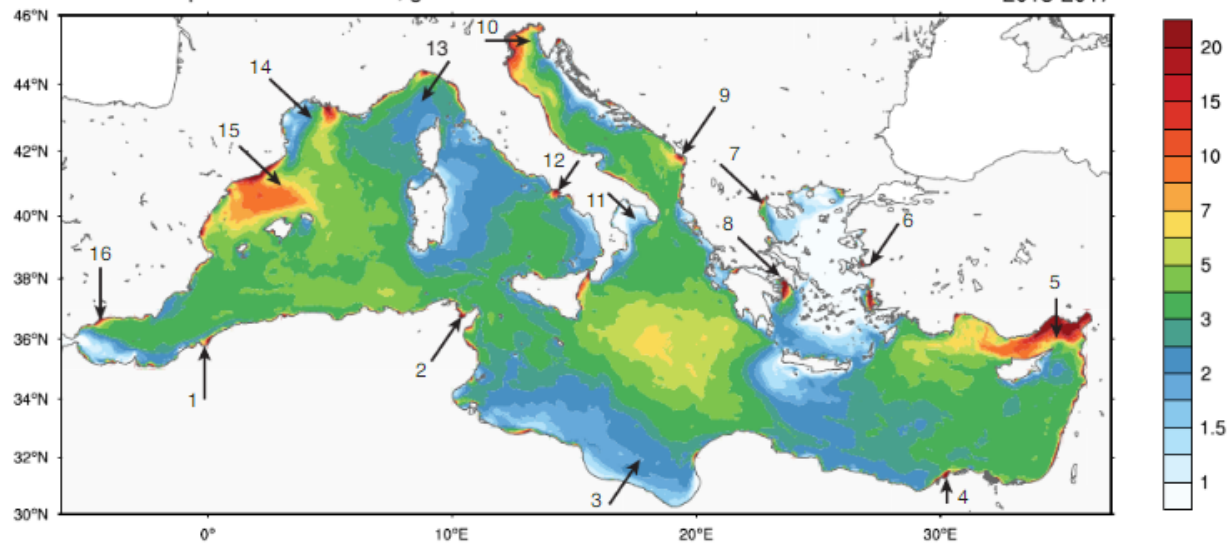
Une dégradation lente, des microplastiques... des nanopolymères?

Des différences régionales

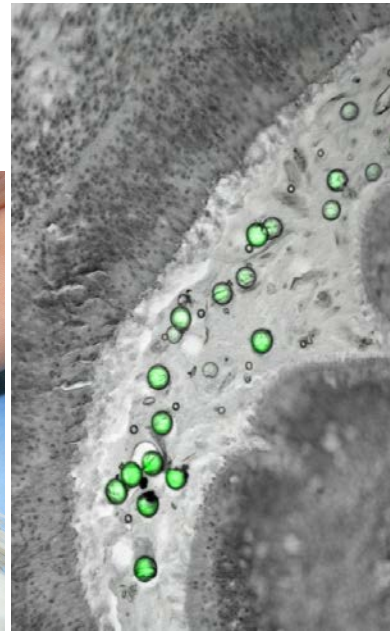


Sea surface plastic concentration, g km^{-2}

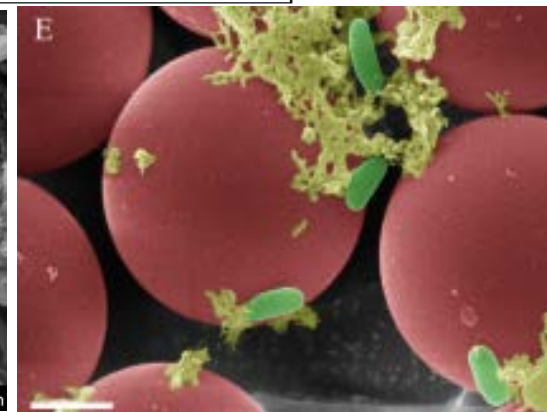
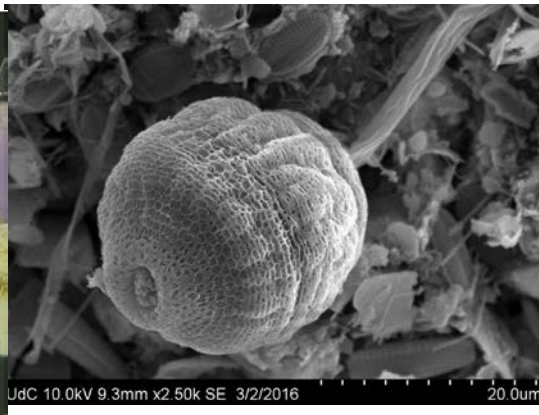
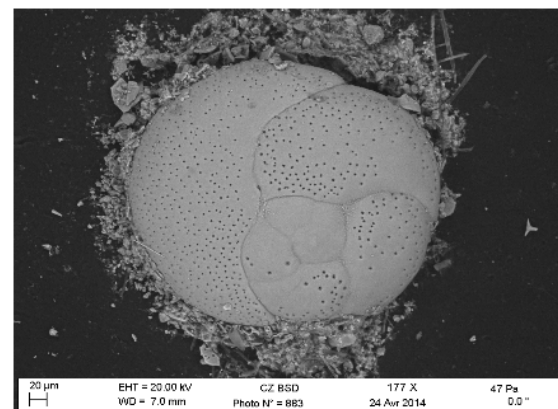
2013-2017



Emmêlements, ingestion et transport d'espèces sont les impacts environnementaux les plus conséquents

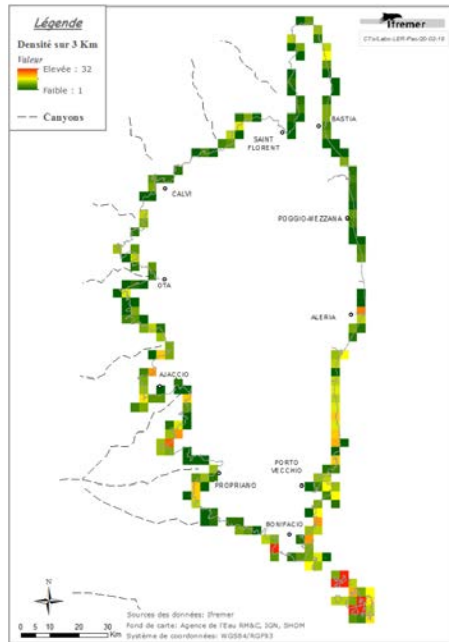
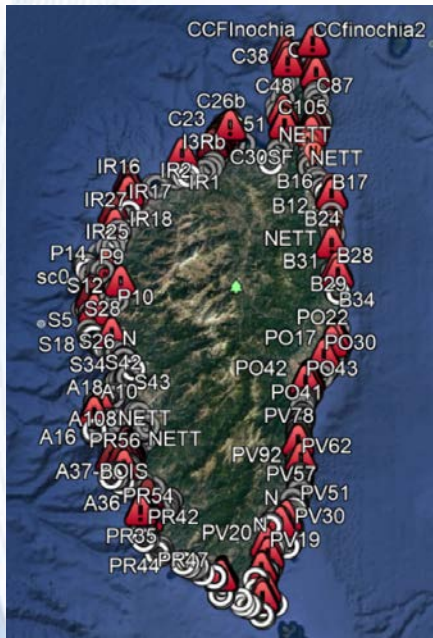


Des risques mal maîtrisés

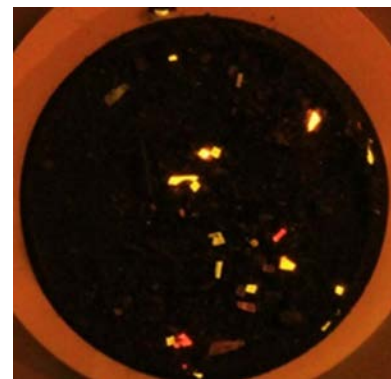
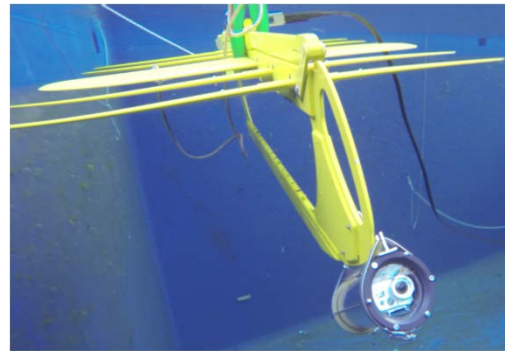


Des enjeux scientifiques et technologiques

Méthodes simples

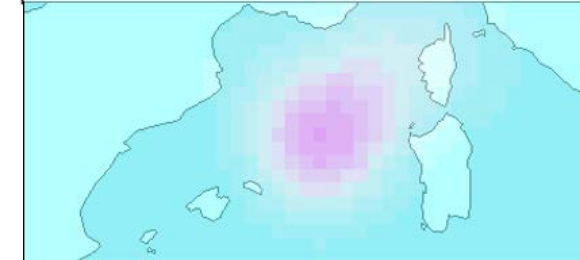
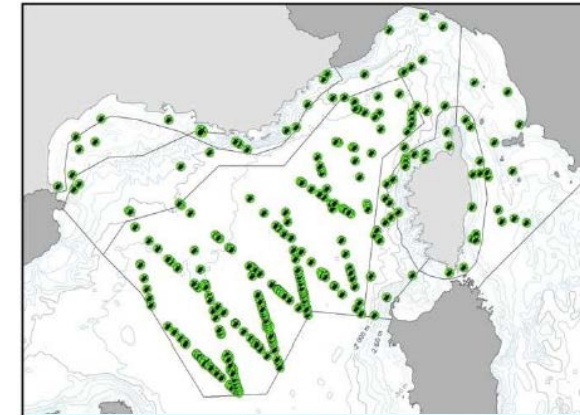


automatisation



Les tres petites particules

Mieux comprendre les effets



Evaluation du risque

Des impacts sociaux économiques, sur la santé





Pas de solution unique

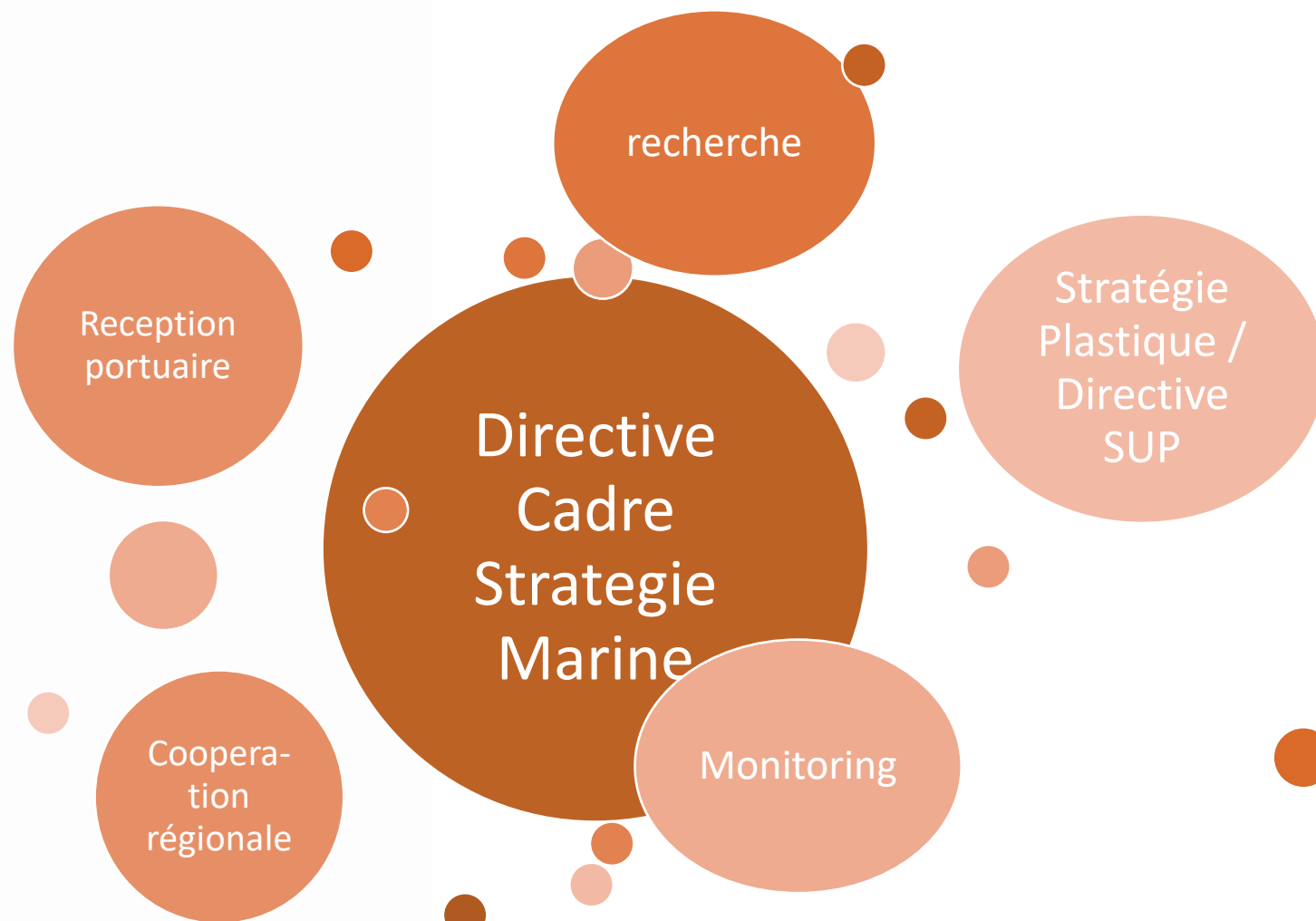
QUI FAIT QUOI?

- Conventions/ agréments
- MARPOL (73/78), Londres(1972), Bale (1992), conférence de Berlin(2013)

- La DCSMM (Europe)
- ONGs (Education, nettoyages, etc.)

- Des initiatives globales
 - SDG 14.1/ UN ENV (CMRs, ANUE, Cleanseas)
 - G7 / G20 (2015) 2017, traitement des eaux
 - DAVOS (2017, recyclabilité)
 - Our oceans/ Coalition (plastic bags pollution)

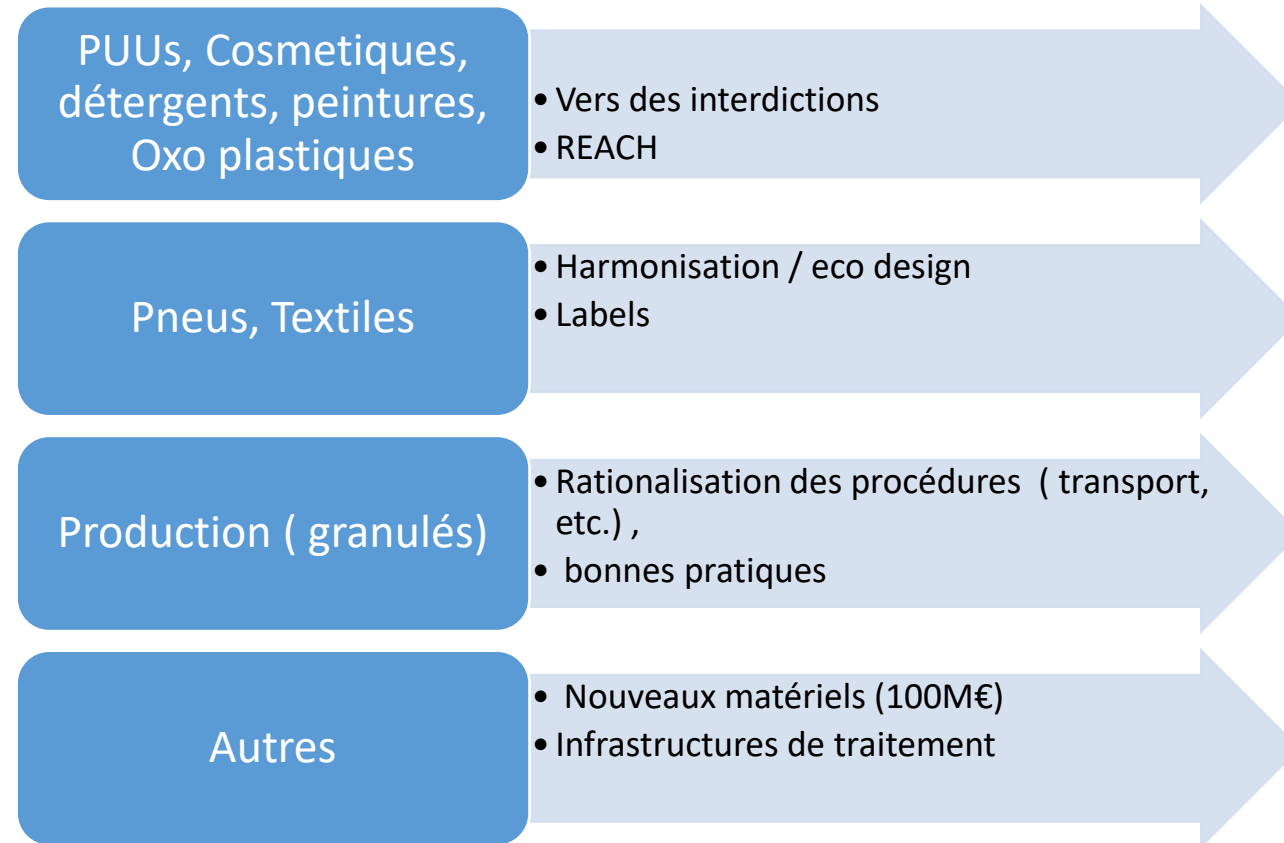
Que fait l'Europe?



D'après Sponar et al., IMDC 2018

Stratégie Plastique / Economie circulaire

Plastiques 100% recyclables en 2030, 55% recyclés



D'après Sponar et al., IMDC 2018