

D.2.2.8. Training materials (video + publications) developed, translated and printed in 500 copies

First Version of 29/June/2022

Deliverable Number D.2.2.8.

Project Acronym	PEPSEA
Project ID Number	10047424
Project Title	Protecting the Enclosed Parts of the Sea in Adriatic from pollution
Priority Axis	2 – Safety and Resilience
Specific objective	2.2 – Increase the safety of the Programme area from natural and man-made disaster
Work Package Number	2
Work Package Title	Communication activities
Activity Number	2.2
Activity Title	Publications
Partner in Charge	PP5 – ARPA FVG
Partners involved	All Partners
Status	Final
Distribution	Public

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Introduction

Work Package (WP) 2 - "Communication Activities" aims to ensure constant promotion and publicity of the project objectives, outcomes and results, throughout the duration of the project to the public.

To this end, the deliverable **D.2.2.8 – "Training materials (video + publications) developed, translated and printed in 500 copies"** has been designed precisely to ensure proper promotion of the activities carried out by the partnership under **WP5 - "Capacity building in the marine pollution response system and community awareness"** and to ensure proper dissemination of the lessons and indications obtained during these activities in order to reach all stakeholders foreseen by the project.

For this reason, **PP5 - ARPA FVG** developed an educational paper for schools and focused on two themes: the sea protection, meaning "what could I do as a boy, day by day, to protect the sea" and "why oils are a problem on the sea".

This publication for pupils has been translated in Italian and Croatian language then printed n.300 copies in Croatian and n.200 in Italian language and distributed to the partners.

PP5 - ARPA FVG also produced two dissemination videos (one in a 13-minute-long version and a shorter 4-minute version) containing highlights of trainings conducted by each project partner during the workshops as results of WP5.

Both videos were published by PP7 - CCIAA on the project website in order to reach an even wider audience. The shorter version was also posted on the PEPSEA project's social media (Facebook): this choice was made in view of the social audiences' preference for short and immediate content.

The videos mentioned here can be reached at the following addresses, respectively:

- Long version: <https://www.youtube.com/watch?v=28ddoODIQNo>
- Short version: <https://www.youtube.com/watch?v=WxgfCMda-q0>

The online version of the educational fact sheets in the three project languages (Italian, Croatian and English) is provided below.

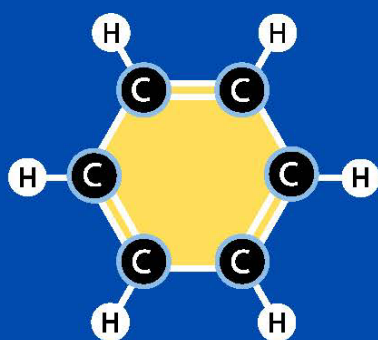
PEPSEA Didactic Sheets – English

FRONT



BACK

HYDROCARBONS IN THE SEA



What are they?

Hydrocarbons are molecules composed solely of carbon and hydrogen and are present in numerous compounds of natural and synthetic origin.

Substances containing hydrocarbons are, for example, animal oils and fats, as well as detergents and a great many cosmetics, fuels and plastics, all substances that can end up in the sea in a variety of ways, often without us noticing.

Many of the substances mentioned come from the processing of petroleum, a mixture of hydrocarbons formed over thousands of years, starting from the decomposition of organic matter in an oxygen-free environment. This is why it is found in deposits within the earth's crust.



How is petroleum transported?

- The transportation of petroleum in the **Mediterranean** represents about 1/3 of the world's maritime traffic!*
- **Italy** is the Mediterranean nation with the highest number of oil ports*



What are the consequences of a spill in the sea?



Larvae are unlikely to reach the adult stage and often suffer altered development



Fish suffocate due to gill blockage



The floating black spot prevents light from entering the water: photosynthesis is blocked



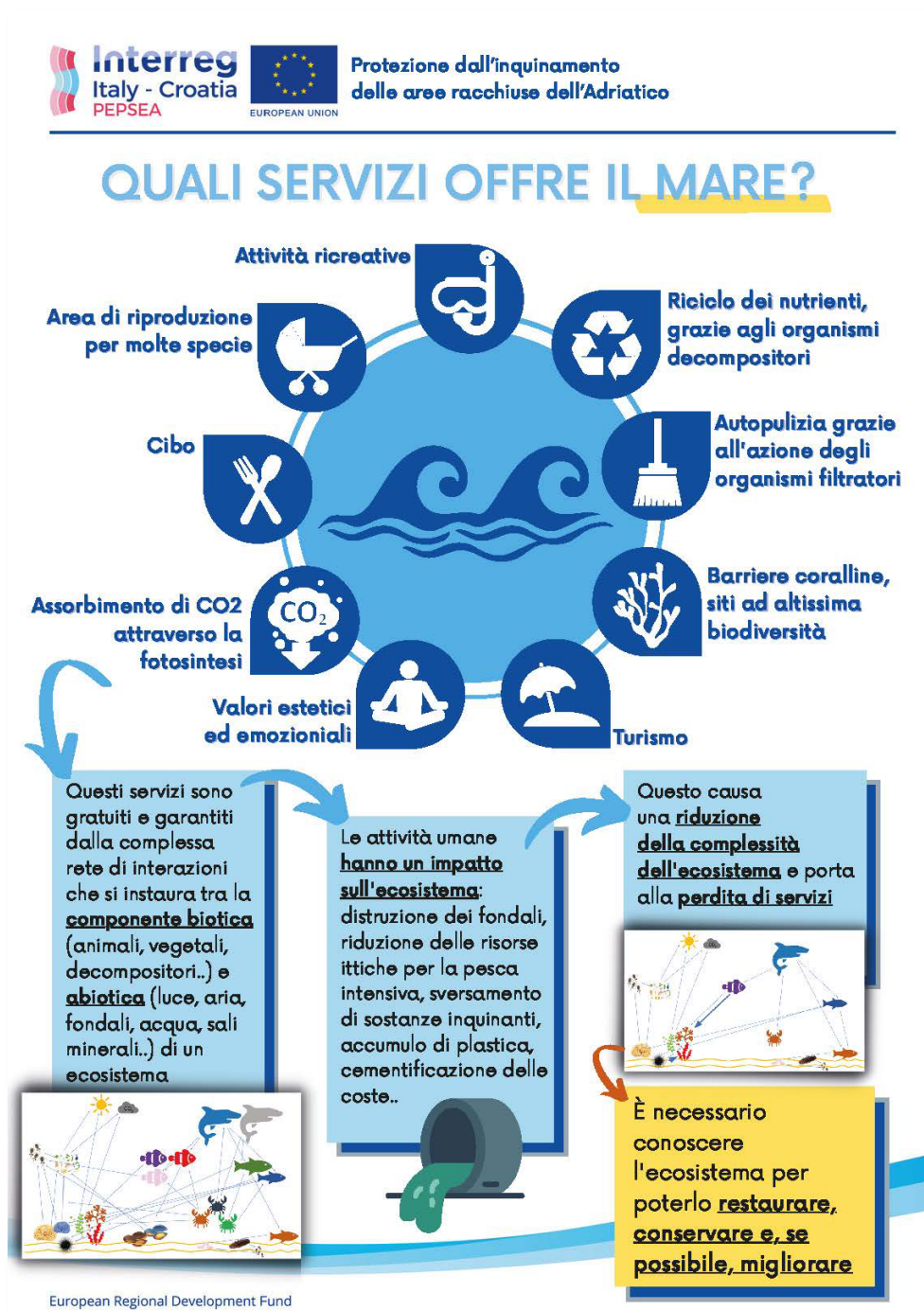
Birds die because they swallow the petroleum and lose the impermeability of their plumage



Marine mammals die from hypothermia, drowning, suffocation and intoxication

PEPSEA Didactic Sheets - Italian

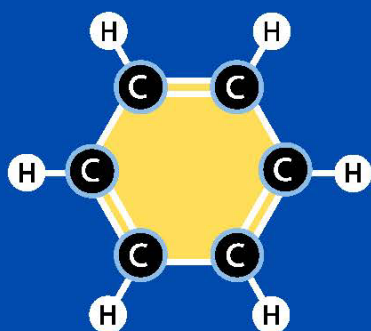
FRONT



BACK

IDROCARBURI IN MARE

Che cosa sono?



Gli idrocarburi sono molecole composte solo da **carbonio** e **idrogeno**, presenti in numerosi composti di origine naturale e sintetica.

Contengono idrocarburi ad esempio gli oli e i grassi animali, ma anche i detersivi e molti cosmetici, i carburanti e le materie plastiche, **tutte sostanze che in vario modo possono finire in mare**, spesso senza che ce ne accorgiamo.

Molte delle sostanze citate, derivano dalla **lavorazione del petrolio**, una miscela di idrocarburi che si forma nel corso di migliaia di anni, a partire dalla decomposizione di materia organica in ambiente privo di ossigeno. Per questo si ritrova in giacimenti all'interno della crosta terrestre.



Come si trasporta il petrolio?

- Il trasporto di petrolio nel **Mediterraneo** rappresenta circa 1/3 del traffico marittimo mondiale!*
- L'**Italia** è la nazione del Mediterraneo col più alto numero di porti petroliferi!*



Quali sono le conseguenze di uno sversamento in mare?



La chiazza nera galleggiante impedisce l'ingresso in acqua della luce: **la fotosintesi viene bloccata**



Le **larve** degli invertebrati marini difficilmente raggiungono lo stadio adulto e spesso subiscono alterazioni dello sviluppo



Gli **uccelli** muoiono perché ingoiano il petrolio e perdono l'impermeabilità del piumaggio



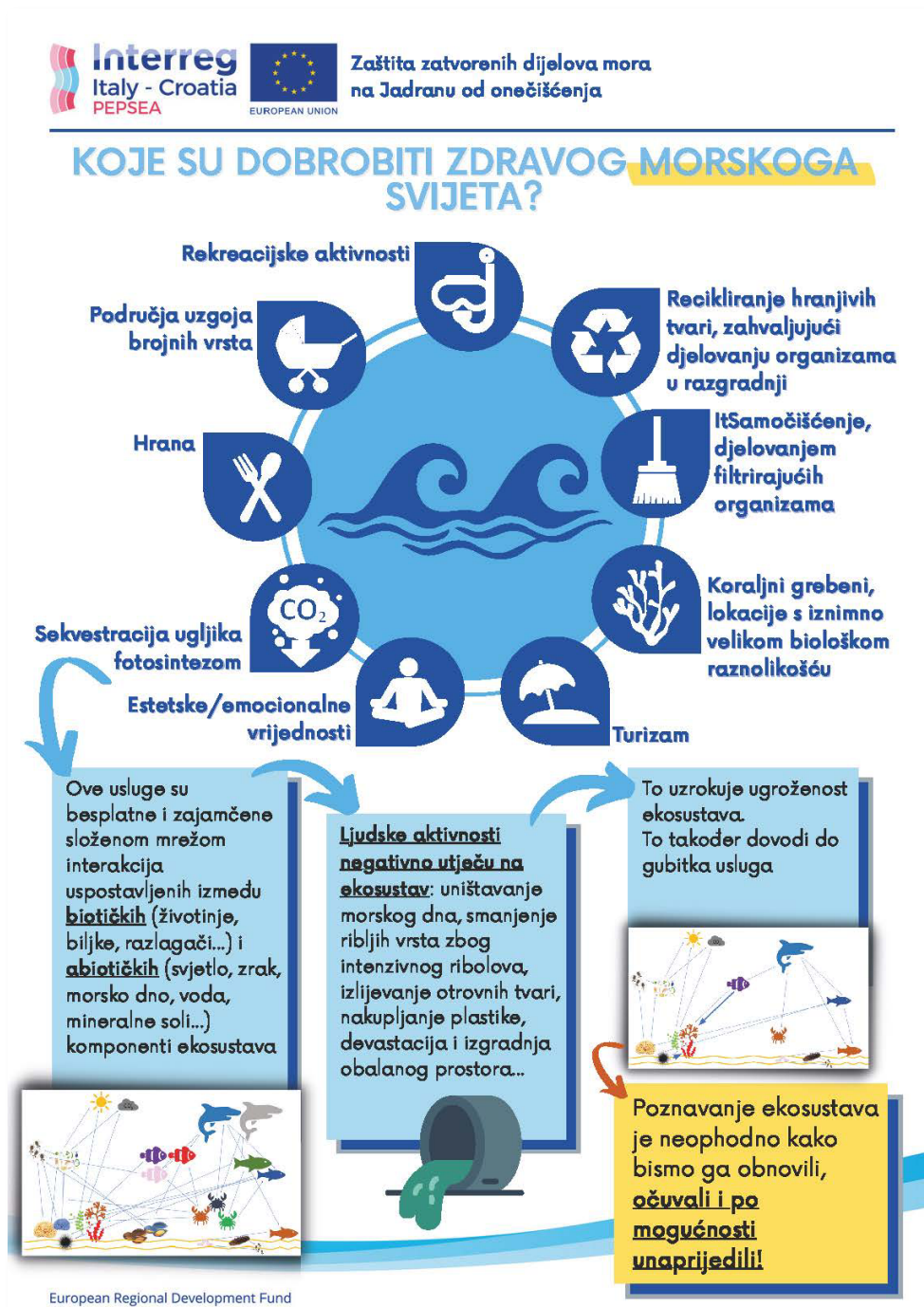
I **pesci** soffocano per occlusione delle branchie



I **mammiferi** marini muoiono per ipotermia, annegamento, soffocamento e intossicazione

PEPSEA Didactic Sheets - Croatian

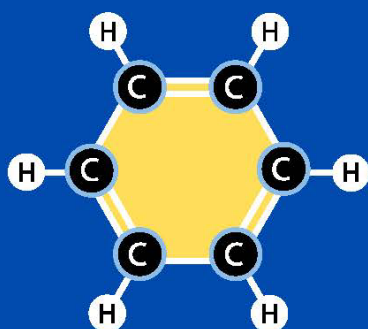
FRONT



BACK

UGLJKOVODICI U MORU

Što su oni?



Ugljikovodici su molekule sastavljene od ugljika i vodika, prisutne u brojnim spojevima prirodnog i sintetskog podrijetla.

Primjeri tvari koje sadrže ugljikovodike su ulja životinjskog podrijetla i masti, deterdženti, brojni kozmetički preparati, gorivo i plastika, sve tvari koje na razne načine mogu završiti u moru, često a da to niti ne primijetimo.

Mnoge od spomenutih tvari nastaju prilikom prerade nafte, mješavine ugljikovodika koja je nastala tijekom tisuća godina, počevši od razgradnje organske tvari u okruženju bez kisika. Zbog toga se nalazi u naslagama unutar zemljine kore.



Kako se nafta transportira u svijetu?

- Prijevoz nafte na Mediteranu predstavlja oko 1/3 svjetskog pomorskog prometa*
- Italija je mediteranska država s najvećim brojem naftnih luka*



Koje su posljedice izlivanja ulja u more?



Plutajuća crna uljna mrlja sprječava ulazak svjetlosti u vodu, zbog čega je fotosinteza onemogućena



Ličinke životinja se vrlo teško razvijaju te su često podvrgnute oštećenjima prilikom razvoja



Ptice ugibaju jer gutaju ulje i uništava im se perje



Ribe se guše zbog začepjenja škrga



Morski sisavci ugibaju radi hipotermije, utapanja, gušenja i intoksikacije