

to pollute [pə'lu:t]

water pollution

noise pollution

a polluter

a pollutant

polluting

to pollute little / a lot

non-polluting, eco-friendly products

to reduce, curb pollution

to waste

wastage

polluer

la pollution de l'eau

la pollution sonore

un pollueur

un polluant, une substance polluante

polluant

être peu / très polluant

produits non polluants

diminuer la pollution

gaspiller

le gaspillage OU les déchets

The “**polluter pays principle**” says that a polluter should bear (*supporter*) the cost of pollution. It was adopted at the Earth Summit of 1992 and is therefore included in the Rio Declaration on Environment and Development adopted during that summit.

air pollution

smog

a pollution peak

factory smoke, factory fumes [fju:mz]

car exhausts [ɪg'zɔ:sts], exhaust fumes

unleaded, lead-free petrol

a catalytic converter

to monitor air quality

to have difficulty breathing

asthma ['æsmə]

la pollution de l'air,

la pollution atmosphérique

le smog

un pic de pollution

les fumées d'usine

les gaz d'échappement

l'essence sans plomb

un pot catalytique

surveiller la qualité de l'air

avoir du mal à respirer

l'asthme

Britain passed its first **Clean Air Act** (*loi sur la pureté de l'air*) in 1956 in response to the **Great Smog** of December 1952 (a period of five days when a mixture of fog, chimney smoke and other pollutants formed a thick blanket over London, resulting in several thousand premature deaths). It stipulated that power stations (*centrales thermiques*) had to be relocated to rural areas. The 2008 EU's clean directive, which became law in 2010, set limits for nitrogen dioxide, a toxic gas produced by diesel vehicles. Since 2005 manufacturers throughout the EU have had to ensure that carbon emissions from cars are 130g CO<sub>2</sub> per kilometre, down from 188g in 1998. Nevertheless the situation remains critical in London, one of the most polluted cities on the planet, where 9,500 early deaths are caused by air pollution every year.

nitrates ['naɪtreɪts]	les nitrates
fertilizers ['fɜːtɪlaɪzəʒ]	les engrais
groundwater	la nappe phréatique
to poison ['pɔɪzɪn] rivers	contaminer les rivières
to contaminate	contaminer
a contaminant	un polluant, une substance polluante
a toxic chemical	une substance chimique toxique
dioxin [daɪ'ɒksɪn]	la dioxine
harmful	nocif
the sewage system	les égouts
a sewer ['sjuə]	un égout
sewage ['suːɪdʒ, 'sjuːɪdʒ], waste water	les eaux usées
a sewage works, a sewage plant (US), a sewage farm (GB)	une station d'épuration des eaux
asbestos	l'amiante
to remove asbestos from a building	désamianter un bâtiment
lead poisoning [led 'pɔɪzɪnɪŋ]	le saturnisme
PCBs	les PCB
CFCs	les gaz CFC
the ozone layer ['əʊzəʊn 'leɪə]	la couche d'ozone
acid rains	les pluies acides

The term **Anthropocene** (from the Greek *anthropos* "man" and *kainos*, "new, recent") has been coined to refer to a distinct geological era which started when human activity started to have a significant impact on the planet's ecosystems. Scientists do not agree when this was, however: many think it should be the beginning of the Industrial Revolution in the late 18th century, but others have proposed the mid-20th century, while yet others date it back to the invention of agriculture (the so-called **Agricultural Revolution** or Neolithic Revolution) about 12,000 years ago, in which case it would almost coincide with the Holocene.

an oil slick	une marée noire
an oil spill	un déversement accidentel de pétrole
oil-covered birds	des oiseaux mazoutés
to empty one's tanks, to flush out one's tanks	dégazer
oil tankers emptying their tanks, discharging waste oil	le dégazage

The **Blacksmith Institute** is a New York based NGO whose purpose is to support environmental projects in conjunction with donors and governments. It identifies locations in the developing world where human health is most affected by pollution and designs (*conçoit*) remediation strategies. According to the Blacksmith Institute, the top pollution problems in the world today include radioactive waste, industrial mining (*exploitations minières*), groundwater (*nappe phréatique*) contamination, untreated sewage and air pollution.

waste, rubbish (GB), garbage (US)	les ordures, les débris, les déchets
toxic / organic waste	les déchets toxiques / organiques
litter	les débris

to dispose of waste	éliminer des déchets
hazardous waste	les déchets dangereux
household refuse, household rubbish	les ordures ménagères
disposable [dis'pəʊzəbl]	jetable
biodegradable	biodégradable
to collect waste	ramasser des déchets
waste collection	le ramassage des ordures
a waste collection centre	une déchetterie
a dustman (GB), a garbage man (US)	un éboueur
a dustbin, a bin (GB), a garbage can (US)	une boîte à ordures, une poubelle
a wheelie bin	une poubelle (à roulettes)
a bin lorry, a dust cart (GB), a garbage truck (US)	un camion poubelle
a bin liner	un sac poubelle

British women discard (*se débarrassent de*) their hairdryers after three years, usually in favour of another one that simply looks different. The average ownership of a mobile phone lasts 18 months... "We don't throw things away because they are broken - it's usually because we have fallen out of love with them (*on ne les aime plus*)", says Jonathan Chapman, a senior lecturer in design at the University of Brighton, who is trying to promote what he calls "emotionally durable" design as a way of reducing the generation (*production*) of toxic waste.

*New Statesman*, February 5th, 2007

consumerism	le consumérisme
to dump rubbish	déposer, jeter des ordures
to throw away	jeter
a rubbish dump (GB), a garbage dump (US), a rubbish tip, a dumping ground	une décharge, un dépôt
an illicit rubbish dump	une décharge sauvage
to bury	enterrer, enfouir
a landfill	un site d'enfouissement des ordures
to burn	brûler
to destroy	détruire
an incinerator	un incinérateur
to melt	fondre
a leak [li:k]	une fuite

Any time space shuttles travel into space they leave debris behind. It might be tools, old engine parts, fuel tanks or even an astronaut's gloves. Satellites eventually wear out (*s'user*) and stop working. They, too, become space junk. Most of this junk orbits around the Earth, although some of it is found deeper in space. It can cause serious problems: working satellites can crash into space junk, creating even more space junk. Sometimes space junk falls back to the Earth. Most of the time it burns up before it reaches the ground, but not always. So far, no-one's been seriously hurt because it often lands in oceans or places where very few people live.

nuclear waste	les déchets nucléaires
radioactive fallout ['fɔ:laut]	retombées radioactives

radioactivity	la radioactivité
carcinogenic [ˌkɑːsɪnəˈdʒenɪk]	cancérogène
to dispose of nuclear waste	éliminer les déchets nucléaires
nuclear waste disposal	l'élimination des déchets nucléaires
a container	un conteneur
hermetically sealed containers	des conteneurs hermétiquement fermés
a leak [li:k]	une fuite
the storage of nuclear waste	le stockage des déchets radioactifs
the precautionary principle,	le principe de précaution
the safety-first principle	

On 28 March, 1979, a malfunction (*dysfonctionnement*) in the cooling system of a reactor at the **Three Mile Island** nuclear facility (in Pennsylvania, USA) caused a partial meltdown (*fusion*) of the reactor core (*cœur*). This led to the release of a significant amount of radioactivity. The incident is said to have caused deaths from lung cancer and leukemia (*leucémie*) but this is disputed (*contesté*) by the nuclear industry. It was the worst civilian nuclear accident in the US.

to process waste	traiter, transformer des déchets
to sort	trier
sorting, waste separation	le tri sélectif
a bottle bank	un conteneur de verre
rags	des chiffons
cardboard	le carton
scrap metal	la ferraille
packaging	les emballages
a can of beer, a beer can	une boîte de bière
a glut [glʌt]	un surplus, un excès

As the world's population grows, people are consuming more, creating more trash, and countries are looking for ways to deal with it that put less stress on the environment.

Many are part of a growing movement sometimes called Zero Waste or the Circular Economy. It entails trying to eliminate tough-to-recycle items like flimsy (*mince*) plastic bags and also pioneering new ways to recycle or compost everything else. Often, cities around the world have led the way, including Portland, Oregon; Seattle; and Milan, as well as the Basque region in Spain. That has given rise to a trash tourism circuit... [But] skeptics contend that the energy and other resource costs required to recycle some items are not worth the investment.

*The New York Times*, 2016

recycling	le recyclage
to recycle plastic	recycler le plastique
recyclable	recyclable
a recycling plant	une usine de recyclage
recycling costs	les coûts de recyclage

Don't just bin it, recycle it (slogan on London bin lorry).

### Traduire en français

1. In 1970 Canada passed its Clean Air Act which regulated the release of four pollutants: asbestos, lead, mercury and vinyl chloride.
2. Not removing asbestos from public buildings is dangerous as it may be released by accidental damage or vandalism.
3. The explosion of a chemical plant in the Indian city of Bhopal in 1984 is viewed as the worst industrial disaster ever.
4. Often, we don't discard things because they are broken but because we have fallen out of love with them.
5. After the disaster at the Chernobyl nuclear reactor in 1986, people reported heavy black rain and there were allegations that residents suffered radiation poisoning.
6. By 2030, Chinese people will produce three times as much trash as they did in 2009.
7. China has banned shops from giving out free plastic bags and has called on consumers to use baskets instead.
8. One may wonder whether the collection and transportation of waste materials requires more energy than it saves.
9. Critics say recycling is based on the belief that everything has value, everything is worth saving, except your time.
10. As voters, people claim to worry about the planet but as consumers, they hate paying for rubbish disposal.

### Traduire en anglais

1. Tout le monde pense, à tort ou à raison, que les États-Unis sont le pire pollueur de la planète.
2. Moins on fera d'efforts pour réduire la pollution de l'air, plus il y aura de gens qui voudront fuir les centres-villes.
3. Chaque fois qu'il fait beau, les asthmatiques ont plus de mal à respirer.
4. Les dégâts provoqués par l'amiante sont incalculables.
5. Les engrais ont provoqué la prolifération des algues dans les rivières et la contamination des nappes phréatiques.
6. Exxon Valdez est le nom du pétrolier responsable de la marée noire qui a tué des milliers d'oiseaux en Alaska en mars 1989.
7. La société de consommation dans laquelle nous vivons produit de plus en plus d'ordures ménagères.
8. On sait depuis longtemps que l'enfouissement des déchets n'est pas la meilleure façon de les éliminer.
9. Le nucléaire est parfois présenté comme la source d'énergie la plus sûre, ce qui est un comble!
10. On peut se demander si traiter les déchets n'est pas plus onéreux que de les brûler, par exemple.

### Questions

- Is enough done to make people aware of the need to curb pollution?  
How can tragedies such as the ones caused by oil tankers such as the Amoco Cadiz in 1978 or the Erika in 1999 be prevented?  
Is recycling ecologically and economically viable?

**01. La traduction des mots suivants ne pose qu'un problème d'orthographe.**

1. l'asthme • 2. la dioxine • 3. contaminer • 4. détruire • 5. toxique

**02. Tous les mots nécessaires pour compléter ces phrases ont la même racine.**

- The river has been heavily ..... with dangerous industrial waste.
- The "..... pays principle" is mentioned in the Rio Declaration on Environment and Development adopted by the Earth Summit in 1992.
- Sulphur dioxide is one of several ..... that are released into the atmosphere by coal-fired power stations.
- Lake Erie was considered a "dead" body of water because of its severe .....
- The reliance on ..... vehicles is exacerbating climate change.

**03. Trouver les dérivés des mots-racines à gauche.**

<i>du mal</i>	harm	.....	nocif
<i>le plomb</i>	lead	..... petrol	essence sans plomb
<i>le cancer</i>	cancer	.....	cancérigène
<i>recycler</i>	to recycle	.....	recyclage
<i>fertiliser</i>	to fertilize	.....	engrais

**04. Quelle est la traduction correcte des faux-amis suivants**

1. to collect waste • 2. to monitor air pollution • 3. to curb pollution • 4. to sort waste • 5. hazardous waste

**05. Compléter avec la préposition ou particule adéquate ou bien mettre Ø.**

- It will cost a fortune to remove asbestos ..... all public buildings.
- The amount of rubbish people throw ..... increases as they become richer.
- The main concern about nuclear energy is how to dispose ..... the waste it generates.
- With air pollution on the rise, more city-dwellers have difficulty ..... breathing.
- Owners of tankers flushing ..... their tanks at sea should be brought to justice.

**06. Associer les mots suivants: sewage, rag, leak, glut, exhaust à leurs définitions.**

- A ..... is a piece of cloth, often used for cleaning things.
- ..... is the gas produced when an engine is working.
- ..... is the mixture of waste from the human body and used water that is carried away from houses by pipes under the ground.
- A ..... is a supply of something, especially a product or crop, that is more than is needed.
- A ..... is an escape of gas or liquid through a hole in something.

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1. In 1970 Canada passed its Clean Air Act which regulated the release of four pollutants: asbestos, lead, mercury and vinyl chloride. **En 1970, le Canada a adopté sa loi sur la propreté de l'air pour réglementer les émissions de quatre polluants : l'amiante, le plomb, le mercure et le chlorure de vinyle.**
2. Not removing asbestos from public buildings is dangerous as it may be released by accidental damage or vandalism. **Ne pas désamianter les bâtiments publics est dangereux parce que l'amiante peut se propager en cas de dégâts accidentels ou de vandalisme.**
3. The explosion of a chemical plant in the Indian city of Bhopal in 1984 is viewed as the worst industrial disaster ever. **L'explosion d'une usine chimique dans la ville indienne de Bhopal en 1984 est considérée comme la plus grave catastrophe industrielle ayant jamais eu lieu.**
4. Often, we don't discard things because they are broken but because we have fallen out of love with them. **Souvent, on ne jette pas les choses parce qu'elles sont cassées mais parce qu'on ne les aime plus.**
5. After the disaster at the Chernobyl nuclear reactor in 1986, people reported heavy black rain and there were allegations that residents suffered radiation poisoning. **Après le désastre du réacteur nucléaire de Tchernobyl en 1986, il y aurait eu de fortes pluies noires et on a prétendu que des habitants auraient subi des radiations toxiques.**
6. By 2030, Chinese people will produce three times as much trash as they did in 2009. **D'ici 2030, les Chinois produiront trois fois plus d'ordures qu'en 2009.**
7. China has banned shops from giving out free plastic bags and has called on consumers to use baskets instead. **La Chine a interdit aux magasins de distribuer gratuitement des sacs en plastique et a fait appel aux consommateurs pour qu'ils utilisent des paniers à la place.**
8. One may wonder whether the collection and transportation of waste materials requires more energy than it saves. **On peut se demander si le ramassage et le transport des déchets ne demandent pas plus d'énergie qu'ils n'en économisent.**
9. Critics say recycling is based on the belief that everything has value, everything is worth saving, except your time. **Les adversaires du recyclage disent qu'il est fondé sur la croyance que tout a une valeur, que tout mérite d'être économisé, sauf votre temps.**
10. As voters, people claim to worry about the planet but as consumers, they hate paying for rubbish disposal. **En tant qu'électeurs, les gens prétendent qu'ils se préoccupent de la planète, mais en tant que consommateurs, ils détestent payer pour l'élimination des déchets.**

1. Tout le monde pense, à tort ou à raison, que les États-Unis sont le pire pollueur de la planète. **Everyone thinks, rightly or wrongly, that the US is the planet's worst polluter.**
2. Moins on fera d'efforts pour réduire la pollution de l'air, plus il y aura de gens qui voudront fuir les centres-villes. **The less effort will be made to curb air pollution, the more people will want to get away from urban centres.**
3. Chaque fois qu'il fait beau, les asthmatiques ont plus de mal à respirer. **Whenever the weather is nice, asthmatics have more difficulty breathing.**
4. Les dégâts provoqués par l'amiante sont incalculables. **The damage caused by asbestos is incalculable.**
5. Les engrais ont provoqué la prolifération des algues dans les rivières et la contamination des nappes phréatiques. **Fertilizers brought about the proliferation of algae in rivers and the contamination of groundwater.**
6. Exxon Valdez est le nom du pétrolier responsable de la marée noire qui a tué des milliers d'oiseaux en Alaska en mars 1989. **Exxon Valdez is the name of the oil tanker responsible for the oil slick that killed thousands of birds in Alaska in March 1989.**
7. La société de consommation dans laquelle nous vivons produit de plus en plus d'ordures ménagères. **The consumer society we live in produces more and more household refuse.**
8. On sait depuis longtemps que l'enfouissement des déchets n'est pas la meilleure façon de les éliminer. **It has long been known that the burying of waste is not the best way to dispose of it.**
9. Le nucléaire est parfois présenté comme la source d'énergie la plus sûre, ce qui est un comble ! **Nuclear energy is sometimes presented as the safest energy source, which takes the biscuit!**
10. On peut se demander si traiter les déchets n'est pas plus onéreux que de les brûler, par exemple. **It may be wondered whether processing waste is not more costly than burning it, for example.**