

Actions for a zero-carbon future for health: draft search strategies for the umbrella review

These draft search strategies were compiled in the OvidSP Medline and Clarivate Analytics Web of Science Core Collection databases by an experienced information specialist (JF).

The search terms chosen for the decarbonization/climate change concept were sourced from the CUSSH project (shared by KB), and the Lancet Commission on Planetary Health (<https://doi.org/10.17037/DATA.277>). The search terms for systematic and other types of reviews are derived from a published systematic review filter (<https://doi.org/10.1186/1471-2288-12-51>). This has been expanded to retrieve other types of review, not just systematic reviews and to update the filter with new subject headings.

The search strategies were refined with the project team until the retrieved results reflected the scope of the project and contained relevant papers already known to the team. The draft searches will be adapted for each database to incorporate database-specific syntax and controlled vocabularies.

OvidSP Medline

Search strategy notes:

Search lines ending in a '/' are subject heading searches.

Search lines beginning 'exp' are exploded subject heading searches.

Two-letter codes at the end of search lines designate the fields to search. Fields codes used are:

TI: title

AB: abstract

TW: textword

PT: publication type

SH: subject heading

adjn searches for words within n words of each other.

or/x-y combines search sets in the range x-y with Boolean operator OR.

* is used for truncation of words.

? is the optional wildcard, finding 1 or 0 characters.

1. climate change/ or global warming/
2. Greenhouse Gases/ or Greenhouse Effect/
3. Carbon footprint/
4. (exp Weather/ or exp Climate/) and exp Disasters/
5. (climat* adj3 (change? or changing or variab* or disrupt* or hazard* or impact* or vulnerab* or function* or extreme or catastroph* or emergenc* or shift* or dynamic* or sensitiv*)).ti,ab.
6. extreme weather.ti,ab.
7. ((global or planet* or world or climat* or earth or worldwide or world-wide) adj1 (heating or warming or temperature*)).ti,ab.
8. ((global or planet* or world or earth or worldwide or world-wide) adj2 ("co2" or carbon or methane or ozone or nitrous oxide)).ti,ab.

9. ((greenhouse or green-house) adj2 (gas* or effect*)).ti,ab.
10. ("co2" or carbon or GHG or CH4 or methane or N2O or nitro*
oxide* or non-methane volatile organic compound* or NMVOC* or
sulphur dioxide* or ozone or O3 or fluorinated gase* or F-Gas* or
hydrofluorocarbon* or HFCs or perfluorocarbon* or PFCs or sulfur
hexafluoride* or sulphur hexafluoride* or SF6 or chlorofluorocarbon*
or CFCs or hydrochlorofluorocarbon* or HCFCs or halos or air pollut*
or aerosol* or ((short-lived or shortlived) adj3 pollutant*) or
SLCP*) adj3 (mitigat* or reduc* or save* or saving or tackl* or
address* or halt* or stop* or abat* or remission* or moderat* or
modif* or control* or zero or diminish* or decreas* or eliminat* or
elevat* or emission* or rise* or increas* or declin* or sink* or
sequester* or neutral or offset or storage or store or storing or
captur* or perform* or efficien* or conservation or remov*).ti,ab.
11. (emission* adj5 (elevat* or rise or increas* or decreas* or
reduc* or offset*)).ti,ab.
12. tipping point?.ti,ab.
13. (carbon adj3 footprint?).ti,ab.
14. (de-carbon or de-carboni* or decarbon or decarboni*).ti,ab.
15. ((energy* or fuel*) adj3 (green or efficien* or reduc* or
renewable* or save* or saving or clean*)).ti,ab.
16. ((fossil fuel* or coal or oil or gas or carbon) adj3 (phas*
out or exit* or transition* or transform* or clos* or shift* or
decommission* or shut* down or displac* or low* or neutral* or
sustainab*)).ti,ab.
17. (net-zero or netzero).ti,ab.
18. just transition*.ti,ab.
19. (climat* adj3 (solution* or mitigat*)).ti,ab.
20. BECCS.ti,ab.
21. petagram*.ti,ab.
22. or/1-21
23. systematic review/
24. systematic review.tw.
25. meta-analysis.pt.
26. intervention*.ti.
27. (systematic adj2 review*).ti,ab.
28. (meta-analy* or metanaly*).ti,ab.
29. meta synthesis.ti.
30. integrative review*.ti,ab.
31. integrative research review*.ti,ab.
32. rapid review*.ti,ab.
33. umbrella review*.ti,ab.
34. "review of reviews".ti,ab.
35. evidence synthesis.ti,ab. and review.pt.
36. scoping review*.ti,ab.
37. mapping review*.ti,ab.
38. systematic map.ti,ab.
39. mixed-studies review*.ti,ab.
40. mixed-methods review*.ti,ab.
41. "state-of-the-art review*".ti,ab.
42. systemati#ed review*.ti,ab.
43. realist review*.ti,ab.
44. (systematic adj2 screen*).ti,ab.
45. or/23-44

46. (letter or newspaper article or comment).pt.
47. 45 not 46
48. 22 and 47
49. limit 48 to yr="2000 -Current"
50. remove duplicates from 49

Clarivate Analytics Web of Science Core Collection

Search strategy notes:

* is used for truncation.

\$ is used for optional wildcard, finds 0 or 1 character.

Two-letter codes at the beginning of search lines designate the fields to search. Fields codes used are:

TI: title

AB: abstract

TS: topic, searches the title, abstract and keywords

fields.

NEAR/n searches for words within n words of each other.

#1 TI=("climat*" near/3 ("change\$" or "changing" or "variab*" or "distrupt*" or "hazard*" or "impact*" or "vulnerab*" or "function*" or "extreme" or "catastroph*" or "emergenc*" or "shift*" or "dynamic*" or "sensitiv*"))) or AB=("climat*" near/3 ("change\$" or "changing" or "variab*" or "distrupt*" or "hazard*" or "impact*" or "vulnerab*" or "function*" or "extreme" or "catastroph*" or "emergenc*" or "shift*" or "dynamic*" or "sensitiv*")))

#2 TI=("extreme weather") or AB=("extreme weather")

#3 TI(("global" or "planet*" or "world" or "climat*" or "earth" or "worldwide" or "world-wide") near/1 ("heating" or "warming" or "temperature*"))) or AB(("global" or "planet*" or "world" or "climat*" or "earth" or "worldwide" or "world-wide") near/1 ("heating" or "warming" or "temperature*")))

#4 TI(("global" or "planet*" or "world" or "earth" or "worldwide" or "world-wide") near/2 ("co2" or "carbon" or "methane" or "ozone" or "nitrous oxide"))) OR AB(("global" or "planet*" or "world" or "earth" or "worldwide" or "world-wide") near/2 ("co2" or "carbon" or "methane" or "ozone" or "nitrous oxide")))

#5 TI(("greenhouse" or "green-house") near/2 ("gas*" or "effect*"))) or AB(("greenhouse" or "green-house") near/2 ("gas*" or "effect*")))

#6 TI(("co2" or "carbon" or "GHG" or "CH4" or "methane" or "N2O" or "nitro* oxide*" or "non-methane volatile organic compound*" or "NMVOC*" or "sulphur dioxide*" or "ozone" or "O3" or "fluorinated gase*" or "F-Gas*" or "hydrofluorocarbon*" or "HFCs" or "perfluorocarbon*" or "PFCs" or "sulfur hexafluoride*" or "sulphur hexafluoride*" or "SF6" or "chlorofluorocarbon*" or "CFCs" or "hydrochlorofluorocarbon*" or "HCFCs" or "halos" or "air pollut*" or "aerosol*" or (("short-lived" or "shortlived") near/3 "pollutant*")) or "SLCP*") near/3 ("mitigat*" or "reduc*" or "save*" or "saving" or "tackl*" or "address*" or "halt*" or "stop*" or "abat*" or "remission*" or "moderat*" or "modif*" or "control*" or "zero" or "diminish*" or "decreas*" or "eliminat*" or "elevat*" or "emission*" or "rise*" or "increas*" or "declin*" or "sink*" or "sequester*" or "neutral" or "offset" or "storage" or "store" or "storing" or

"captur*" or "perform*" or "efficien*" or "conservation" or "remov*")) OR AB=(("co2" or "carbon" or "GHG" or "CH4" or "methane" or "N2O" or "nitro* oxide*" or "non-methane volatile organic compound*" or "NMVOC*" or "sulphur dioxide*" or "ozone" or "O3" or "fluorinated gase*" or "F-Gas*" or "hydrofluorocarbon*" or "HFCs" or "perfluorocarbon*" or "PFCs" or "sulfur hexafluoride*" or "sulphur hexafluoride*" or "SF6" or "chlorofluorocarbon*" or "CFCs" or "hydrochlorofluorocarbon*" or "HCFCs" or "halos" or "air pollut*" or "aerosol*" or (("short-lived" or "shortlived") near/3 "pollutant*") or "SLCP*") near/3 ("mitigat*" or "reduc*" or "save*" or "saving" or "tackl*" or "address*" or "halt*" or "stop*" or "abat*" or "remission*" or "moderat*" or "modif*" or "control*" or "zero" or "diminish*" or "decreas*" or "eliminat*" or "elevat*" or "emission*" or "rise*" or "increas*" or "declin*" or "sink*" or "sequester*" or "neutral" or "offset" or "storage" or "store" or "storing" or "captur*" or "perform*" or "efficien*" or "conservation" or "remov*"))

#7 TI=("emission*" near/5 ("elevat*" or "rise*" or "increas*" or "decreas*" or "reduc*" or "offset*")) or AB=("emission*" near/5 ("elevat*" or "rise*" or "increas*" or "decreas*" or "reduc*" or "offset*"))

#8 TI=("tipping point\$") or AB=("tipping point\$")

#9 TI=("carbon" near/3 "footprint\$") or AB=("carbon" near/3 "footprint\$")

#10 TI=("de-carbon" or "de-carboni*" or "decarbon" or "decarboni*") or AB=("de-carbon" or "de-carboni*" or "decarbon" or "decarboni*")

#11 TI=(("energy*" or "fuel*") near/3 ("green" or "efficien*" or "reduc*" or "renewable*" or "save*" or "saving" or "clean*")) or AB=(("energy*" or "fuel*") near/3 ("green" or "efficien*" or "reduc*" or "renewable*" or "save*" or "saving" or "clean*"))

#12 TI=(("fossil fuel*" or "coal" or "oil" or "gas" or "carbon") near/3 ("phas* out" or "exit*" or "transition*" or "transform*" or "clos*" or "shift*" or "decommission*" or "shut* down" or "displac*" or "low*" or "neutral*" or "sustainab*")) or AB=(("fossil fuel*" or "coal" or "oil" or "gas" or "carbon") near/3 ("phas* out" or "exit*" or "transition*" or "transform*" or "clos*" or "shift*" or "decommission*" or "shut* down" or "displac*" or "low*" or "neutral*" or "sustainab*"))

#13 TI=("just transition*" or "net-zero" or "netzero") or AB=("just transition*" or "net-zero" or "netzero")

#14 TI=("climat*" near/3 ("solution*" or "mitigat*")) or AB=("climat*" near/3 ("solution*" or "mitigat*"))

#15 TI="BECCS" or AB="BECCS"

#16 TI=("petagram*") or AB=("petagram*")

#17 #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1

#18 TS=("systematic review")

#19 TI=("intervention*" or "meta synthesis" or ("systematic" near/2 "review*") or "meta-analy*" or "metanaly*" or "integrative review*" or "integrative research review*" or "rapid review*" or "umbrella review*" or "review of reviews" or "evidence synthesis" or "scoping review*" or "mapping review*" or "systematic map*" or "mixed-studies review*" or "mixed-methods review" or "state-of-the-

art review*" or "systemati?ed review*" or "realist review*") or
AB=("systematic" near/2 "review*") or "meta-analy*" or "metanaly*"
or "integrative review*" or "integrative research review*" or "rapid
review*" or "umbrella review*" or "review of reviews" or "scoping
review*" or "mapping review*" or "systematic map*" or "mixed-studies
review*" or "mixed-methods review" or "state-of-the-art review*" or
"systemati?ed review*" or "realist review*" or ("systematic" near/2
"screen*"))

#20 #19 OR #18

#21 #20 AND #17

#22 #21 Timespan=2000-2021