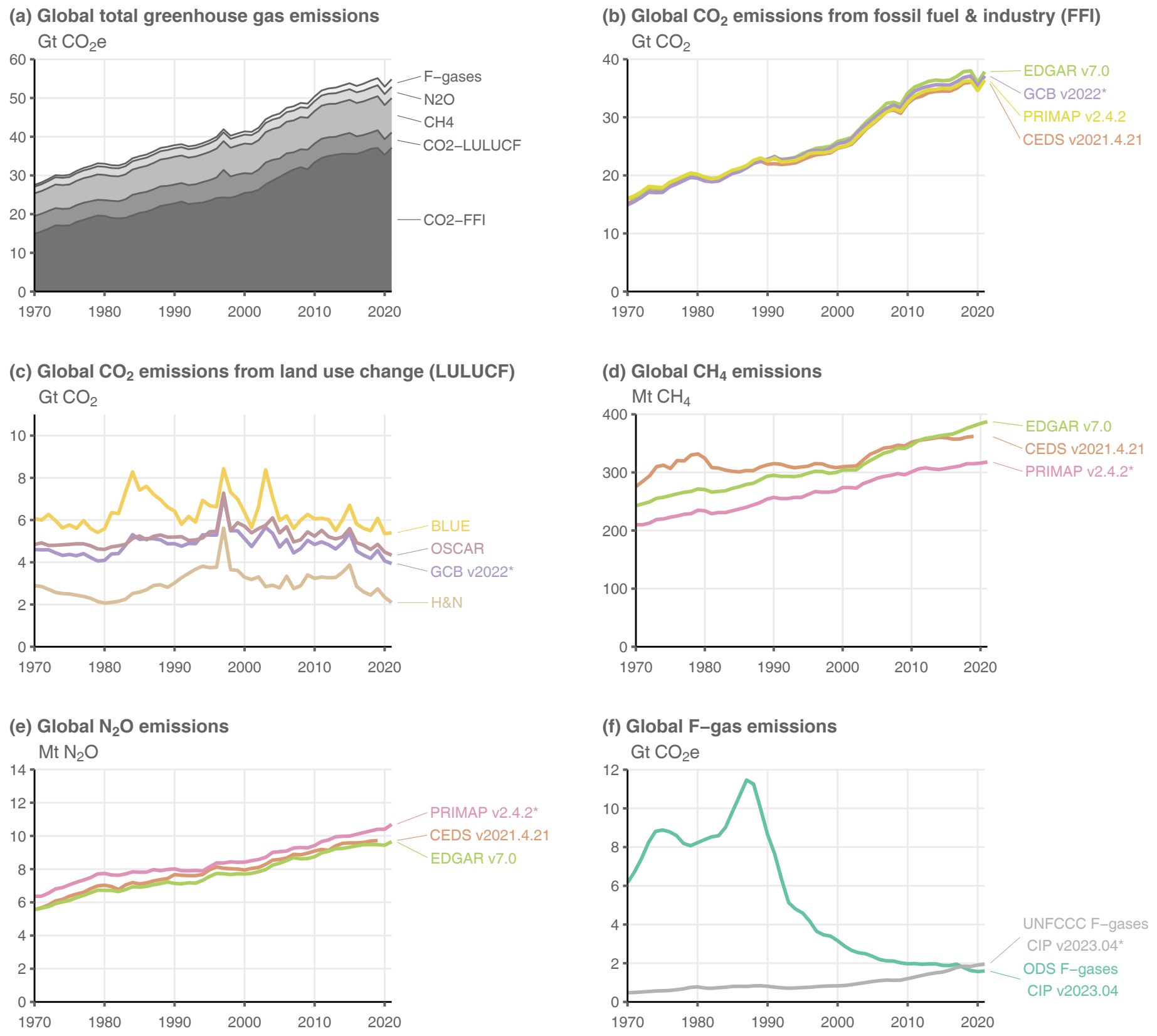
(a) Global total greenhouse gas emissions
Gt CO2e
60
50
40
30
20
10
0
1970
1980
1990
2000
2010
2020
F−gases
N2O
CH4
CO2−LULUCF
CO2−FFI
(b) Global CO2 emissions from fossil fuel & industry (FFI)
Gt CO2
40
30
20
10
0
1970
1980
1990
2000
2010
2020
EDGAR v7.0
GCB v2022*
PRIMAP v2.4.2
CEDS v2021.4.21
(c) Global CO2 emissions from land use change (LULUCF)
Gt CO2
10
8
6
4
2
0
1970
1980
1990
2000
2010
2020
BLUE
OSCAR
GCB v2022*
H&N
(d) Global CH4 emissions
Mt CH4
400
300
200
100
0
1970
1980
1990
2000
2010
2020
EDGAR v7.0
CEDS v2021.4.21
PRIMAP v2.4.2*
(e) Global N2O emissions
Mt N2O
14
12
10
8
6
4
2
0
1970
1980
1990
2000
2010
2020
PRIMAP v2.4.2*
CEDS v2021.4.21
EDGAR v7.0
(f) Global F−gas emissions
Gt CO2e
12
10
8
6
4
2
0
1970
1980
1990
2000
2010
2020
UNFCCC F−gases
CIP v2023.04*
ODS F−gases
CIP v2023.04