ENGAGE

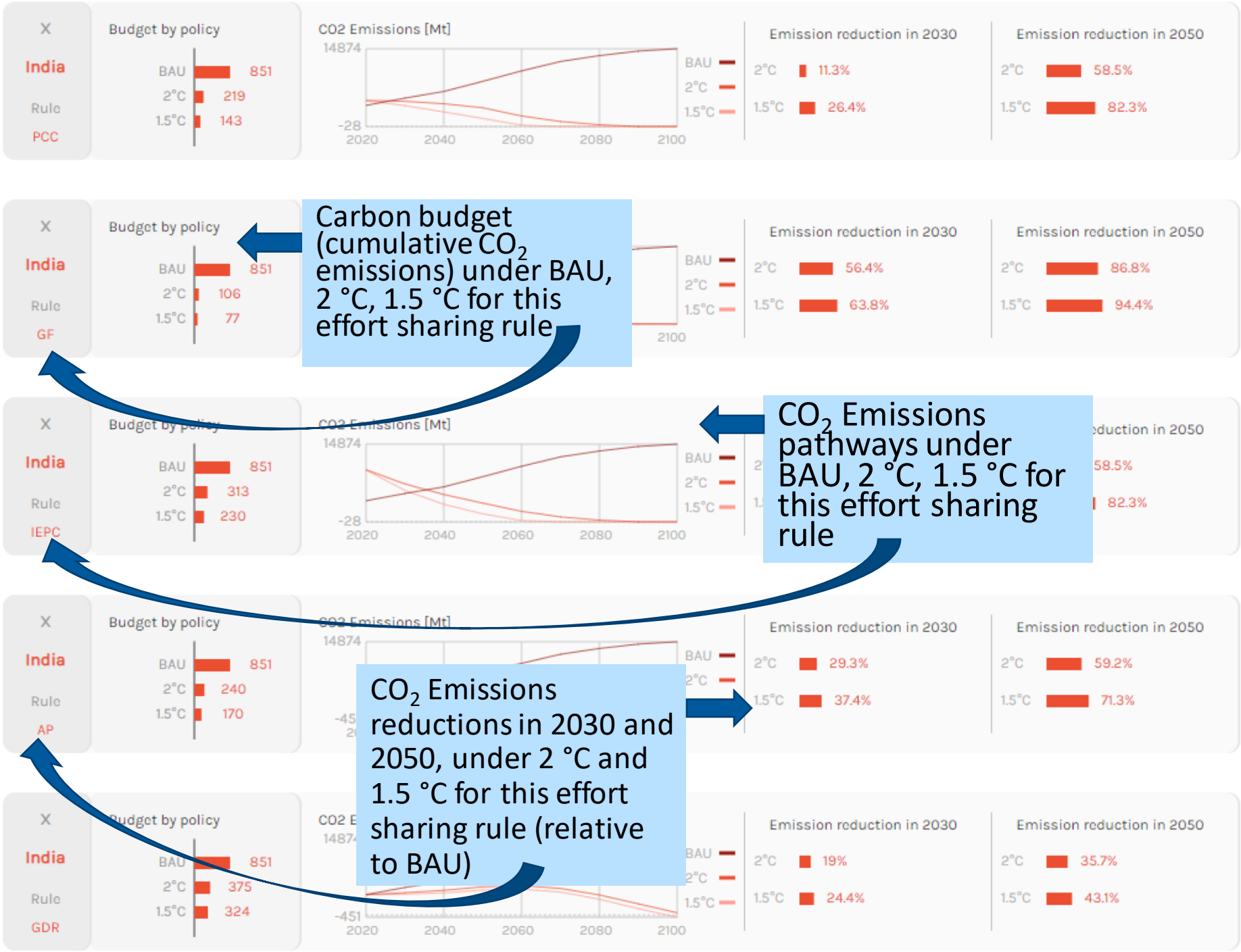
Exploring **N**ational and **G**lobal **A**ctions to reduce **G**reenhouse gas **E**missions

Break-out groups on equity

Explanation of graphs

http://budget-emission.energy-investment.witch-model.accurat.io/

Visualisation tool accompanying this paper by van den Berg et al. (2020) in Climatic Change: https://link.springer.com/article/10.1007/s10584-019-02368-y

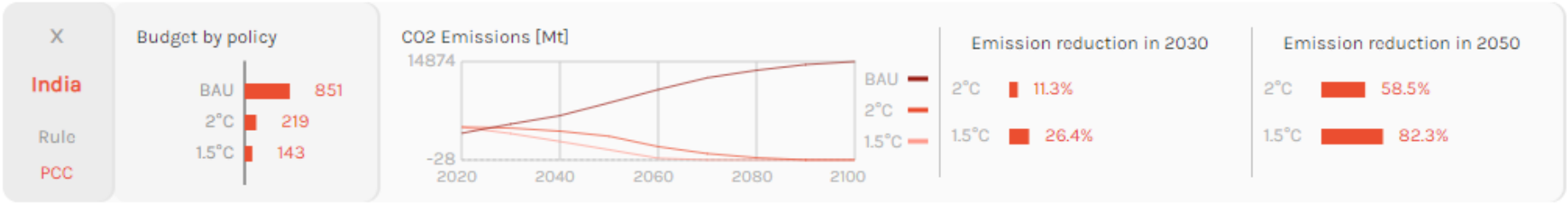


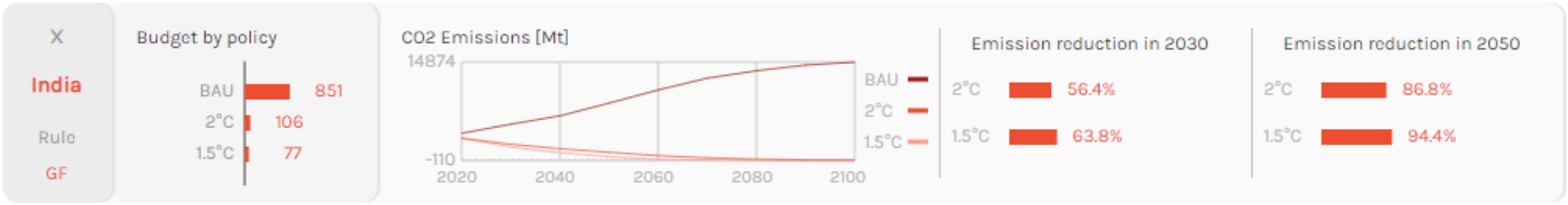
Carbon budget (cumulative CO_2 emissions) under BAU, 2 °C, 1.5 °C for this effort sharing rule

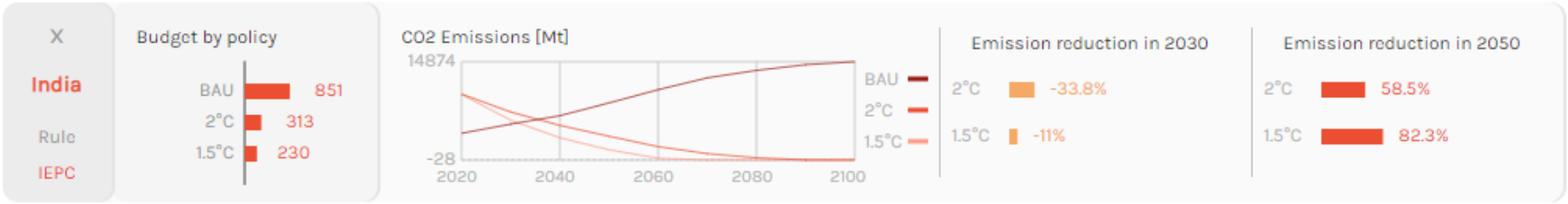
CO_2 Emissions pathways under BAU, 2 °C, 1.5 °C for this effort sharing rule

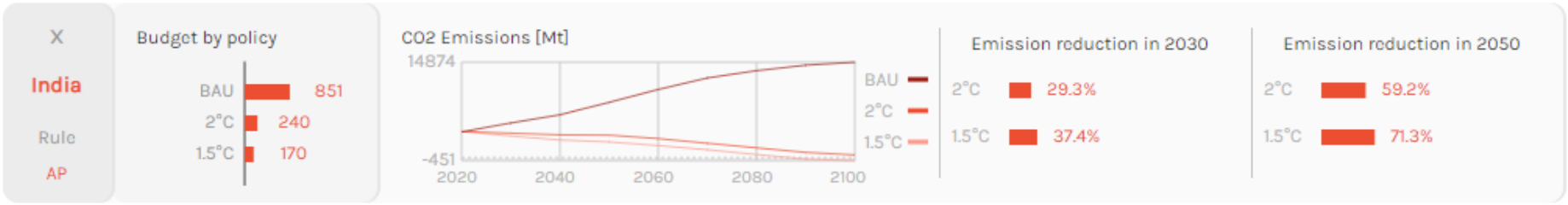
CO_2 Emissions reductions in 2030 and 2050, under 2 °C and 1.5 °C for this effort sharing rule (relative to BAU)

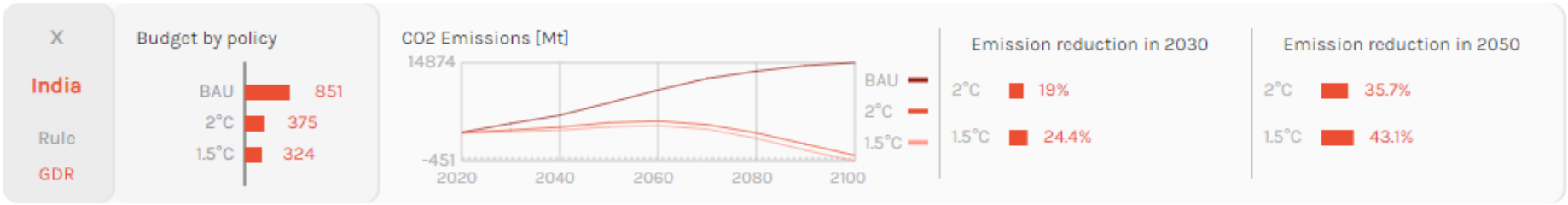
India


X
India
Rule
PCC
Budget by policy
BAU 851
2°C 219
1.5°C 143
CO2 Emissions [Mt]
14874
-28
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 11.3%
1.5°C 26.4%
Emission reduction in 2050
2°C 58.5%
1.5°C 82.3%

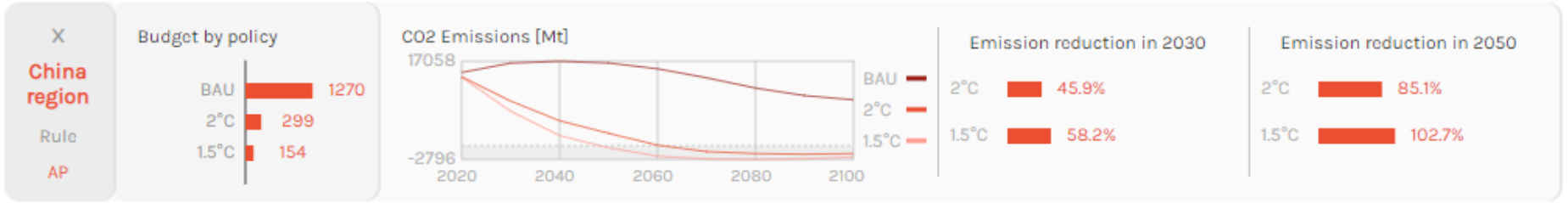

X
India
Rule
GF
Budget by policy
BAU 851
2°C 106
1.5°C 77
CO2 Emissions [Mt]
14874
-110
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 56.4%
1.5°C 63.8%
Emission reduction in 2050
2°C 86.8%
1.5°C 94.4%

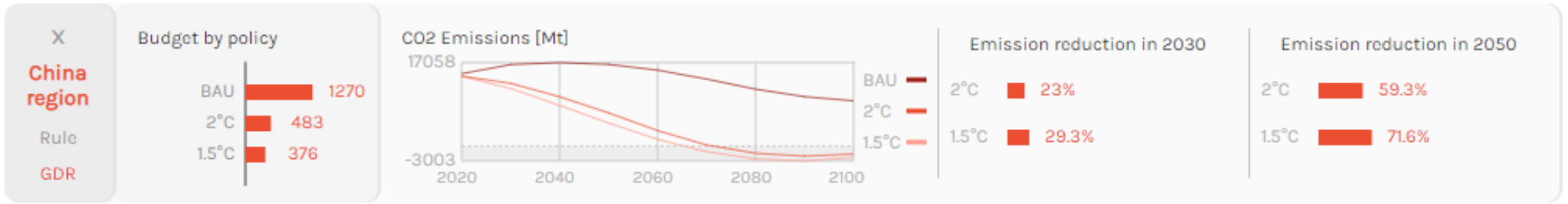

X
India
Rule
IEPC
Budget by policy
BAU 851
2°C 313
1.5°C 230
CO2 Emissions [Mt]
14874
-28
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C -33.8%
1.5°C -11%
Emission reduction in 2050
2°C 58.5%
1.5°C 82.3%

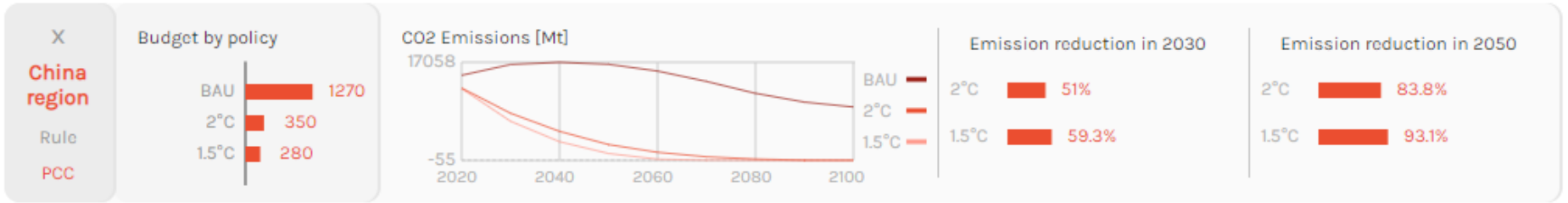

X
India
Rule
AP
Budget by policy
BAU 851
2°C 240
1.5°C 170
CO2 Emissions [Mt]
14874
-451
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 29.3%
1.5°C 37.4%
Emission reduction in 2050
2°C 59.2%
1.5°C 71.3%

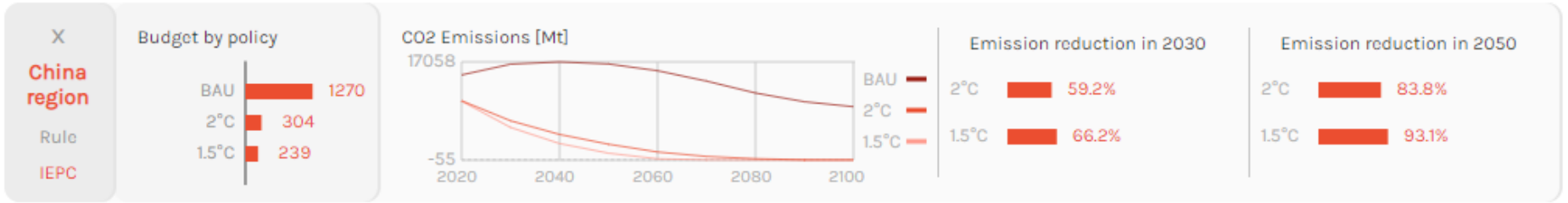

X
India
Rule
GDR
Budget by policy
BAU 851
2°C 375
1.5°C 324
CO2 Emissions [Mt]
14874
-451
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 19%
1.5°C 24.4%
Emission reduction in 2050
2°C 35.7%
1.5°C 43.1%

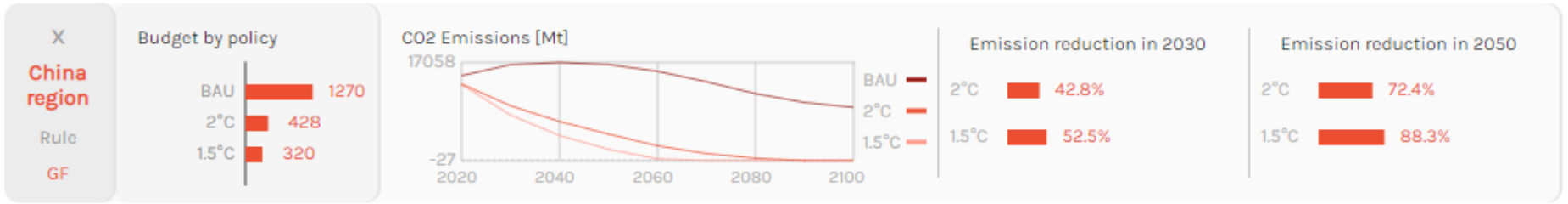
China


X
China region
Rule
AP
Budget by policy
BAU 1270
2°C 299
1.5°C 154
CO2 Emissions [Mt]
17058
-2796
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 45.9%
1.5°C 58.2%
Emission reduction in 2050
2°C 85.1%
1.5°C 102.7%

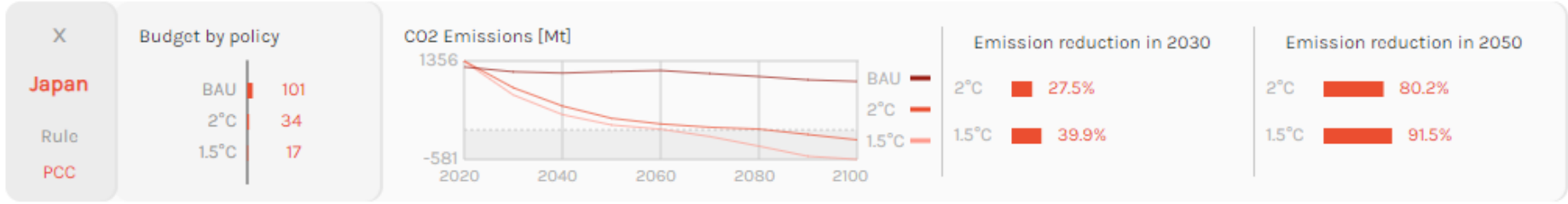

X
China region
Rule
GDR
Budget by policy
BAU 1270
2°C 483
1.5°C 376
CO2 Emissions [Mt]
17058
-3003
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 23%
1.5°C 29.3%
Emission reduction in 2050
2°C 59.3%
1.5°C 71.6%

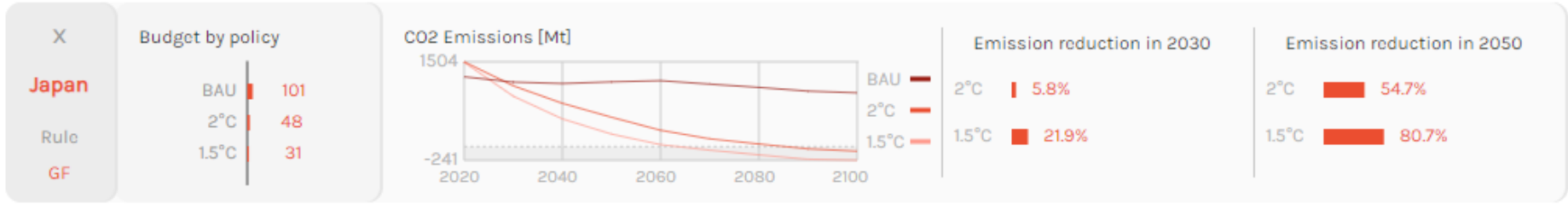

X
China region
Rule
PCC
Budget by policy
BAU 1270
2°C 350
1.5°C 280
CO2 Emissions [Mt]
17058
-55
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 51%
1.5°C 59.3%
Emission reduction in 2050
2°C 83.8%
1.5°C 93.1%

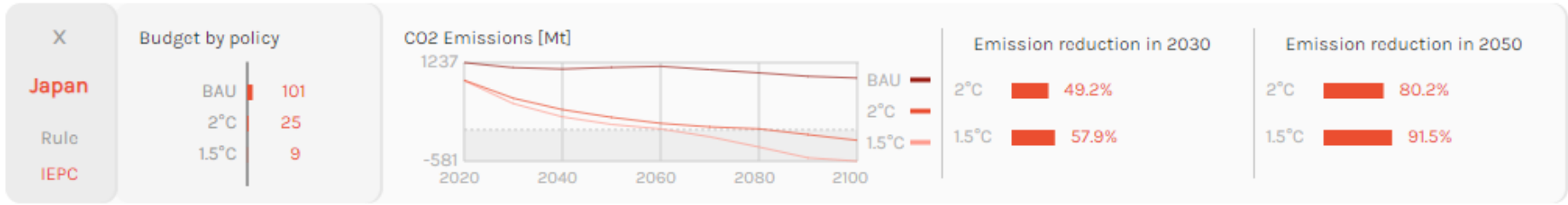

X
China region
Rule
IEPC
Budget by policy
BAU 1270
2°C 304
1.5°C 239
CO2 Emissions [Mt]
17058
-55
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 59.2%
1.5°C 66.2%
Emission reduction in 2050
2°C 83.8%
1.5°C 93.1%

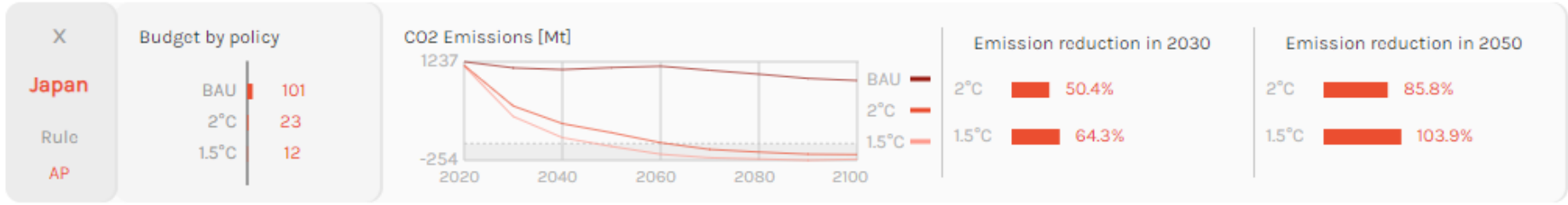

X
China region
Rule
GF
Budget by policy
BAU 1270
2°C 428
1.5°C 320
CO2 Emissions [Mt]
17058
-27
2020 2040 2060 2080 2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 42.8%
1.5°C 52.5%
Emission reduction in 2050
2°C 72.4%
1.5°C 88.3%

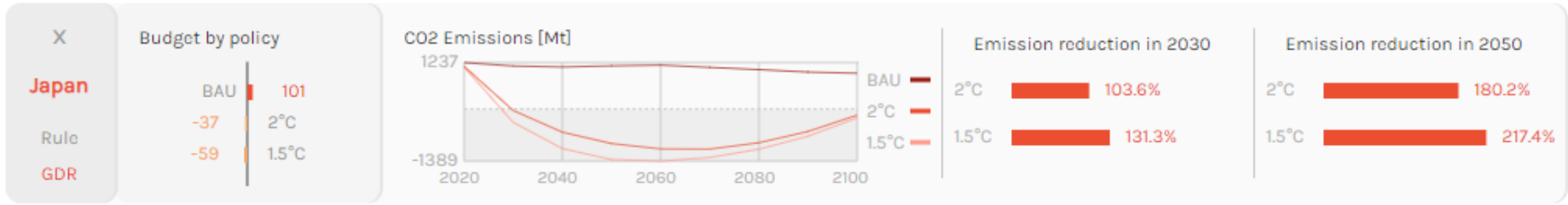
Japan


X
Japan
Rule
PCC
Budget by policy
BAU 101
2°C 34
1.5°C 17
CO2 Emissions [Mt]
1356
-581
2020
2040
2060
2080
2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 27.5%
1.5°C 39.9%
Emission reduction in 2050
2°C 80.2%
1.5°C 91.5%


X
Japan
Rule
GF
Budget by policy
BAU 101
2°C 48
1.5°C 31
CO2 Emissions [Mt]
1504
-241
2020
2040
2060
2080
2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 5.8%
1.5°C 21.9%
Emission reduction in 2050
2°C 54.7%
1.5°C 80.7%


X
Japan
Rule
IEPC
Budget by policy
BAU 101
2°C 25
1.5°C 9
CO2 Emissions [Mt]
1237
-581
2020
2040
2060
2080
2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 49.2%
1.5°C 57.9%
Emission reduction in 2050
2°C 80.2%
1.5°C 91.5%


X
Japan
Rule
AP
Budget by policy
BAU 101
2°C 23
1.5°C 12
CO2 Emissions [Mt]
1237
-254
2020
2040
2060
2080
2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 50.4%
1.5°C 64.3%
Emission reduction in 2050
2°C 85.8%
1.5°C 103.9%


X
Japan
Rule
GDR
Budget by policy
BAU 101
-37 2°C
-59 1.5°C
CO2 Emissions [Mt]
1237
-1389
2020
2040
2060
2080
2100
BAU
2°C
1.5°C
Emission reduction in 2030
2°C 103.6%
1.5°C 131.3%
Emission reduction in 2050
2°C 180.2%
1.5°C 217.4%

Korea

X

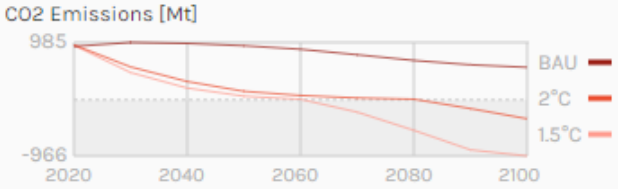
Korea region

Rule

PCC

Budget by policy

BAU	74
2°C	22
-1	1.5°C



Emission reduction in 2030

2°C	42.6%
1.5°C	52.4%

Emission reduction in 2050

2°C	84.4%
1.5°C	93.3%

X

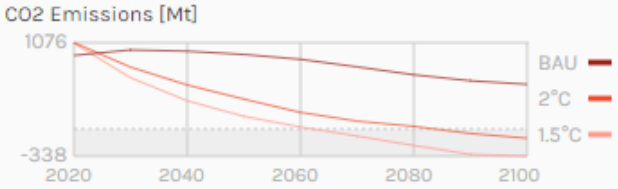
Korea region

Rule

GF

Budget by policy

BAU	74
2°C	34
1.5°C	18



Emission reduction in 2030

2°C	21.7%
1.5°C	35.1%

Emission reduction in 2050

2°C	59.9%
1.5°C	82.9%

X

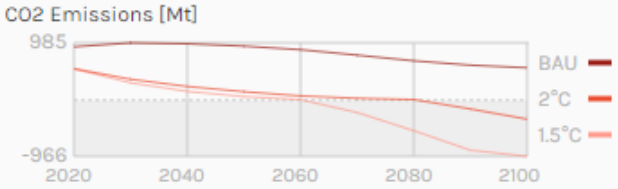
Korea region

Rule

IEPC

Budget by policy

BAU	74
2°C	14
-8	1.5°C



Emission reduction in 2030

2°C	63.6%
1.5°C	69.8%

Emission reduction in 2050

2°C	84.4%
1.5°C	93.3%

X

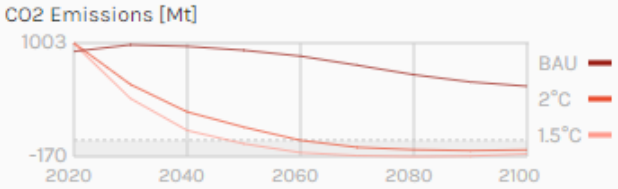
Korea region

Rule

AP

Budget by policy

BAU	74
2°C	20
1.5°C	11



Emission reduction in 2030

2°C	41.7%
1.5°C	56.4%

Emission reduction in 2050

2°C	85.6%
1.5°C	104.1%

X

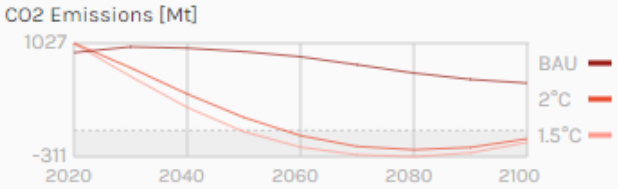
Korea region

Rule

GDR

Budget by policy

BAU	74
2°C	20
1.5°C	11



Emission reduction in 2030

2°C	25%
1.5°C	35.4%

Emission reduction in 2050

2°C	83.7%
1.5°C	101.8%

Southern Asia

- Thailand
- Malaysia