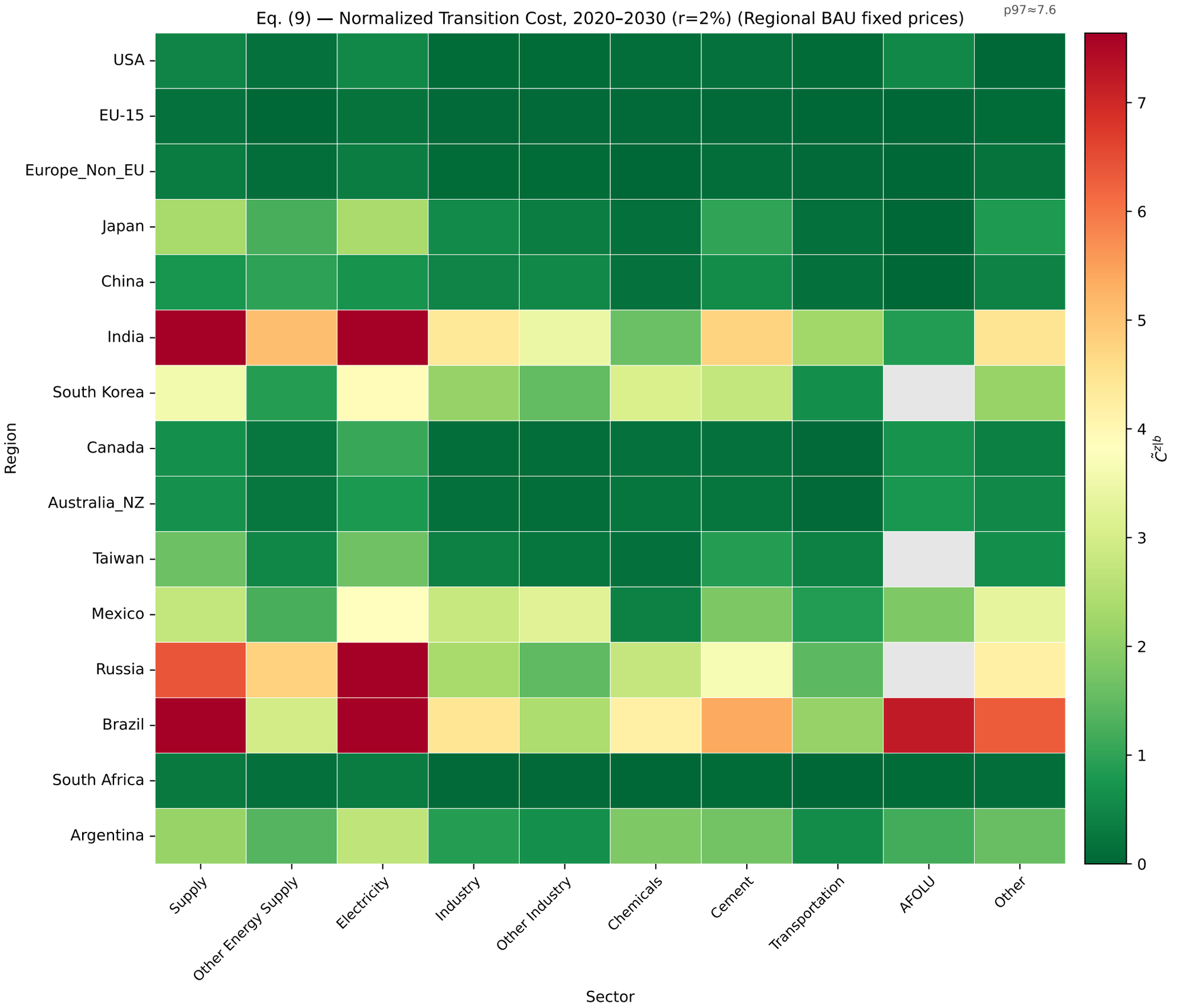
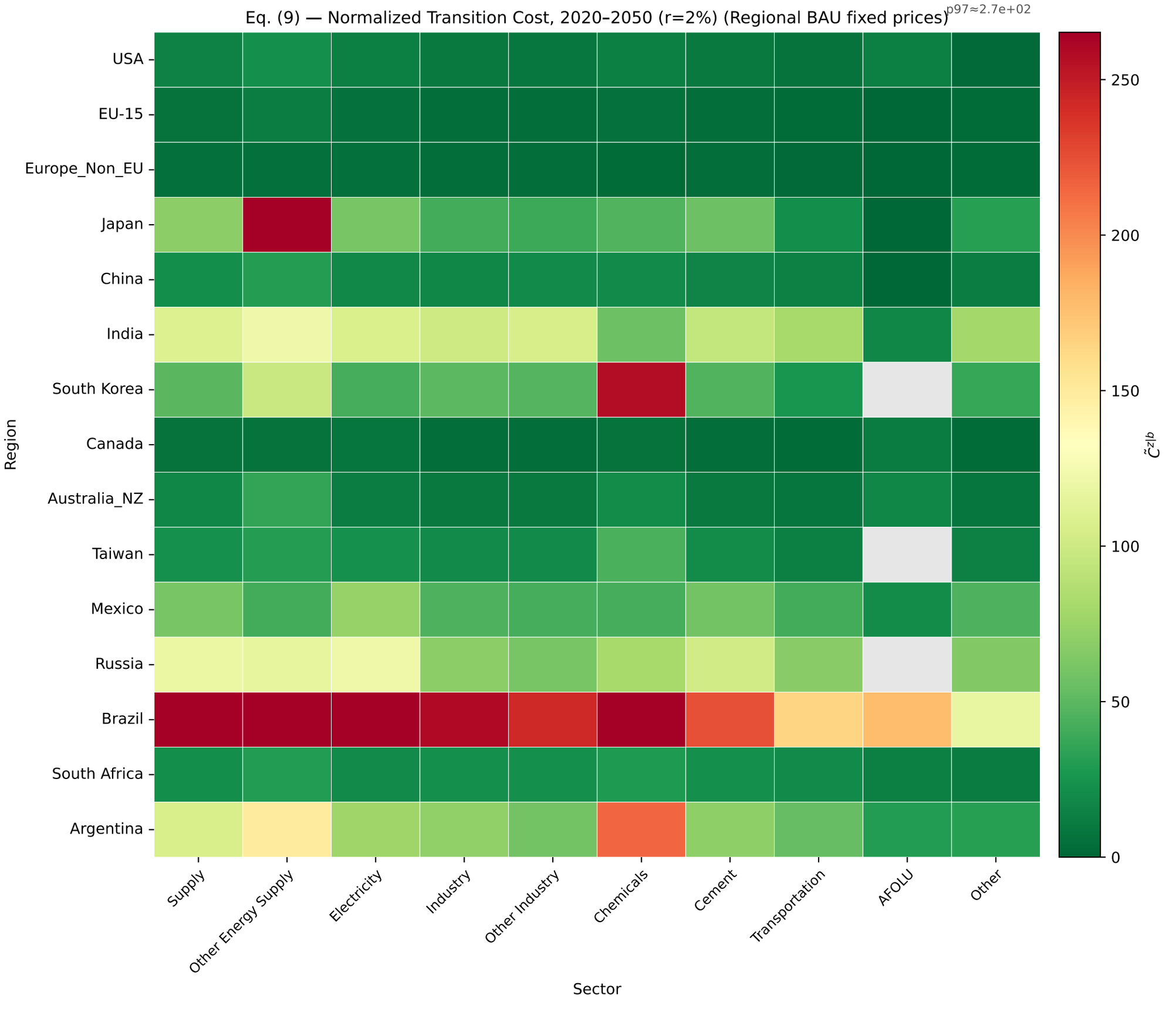
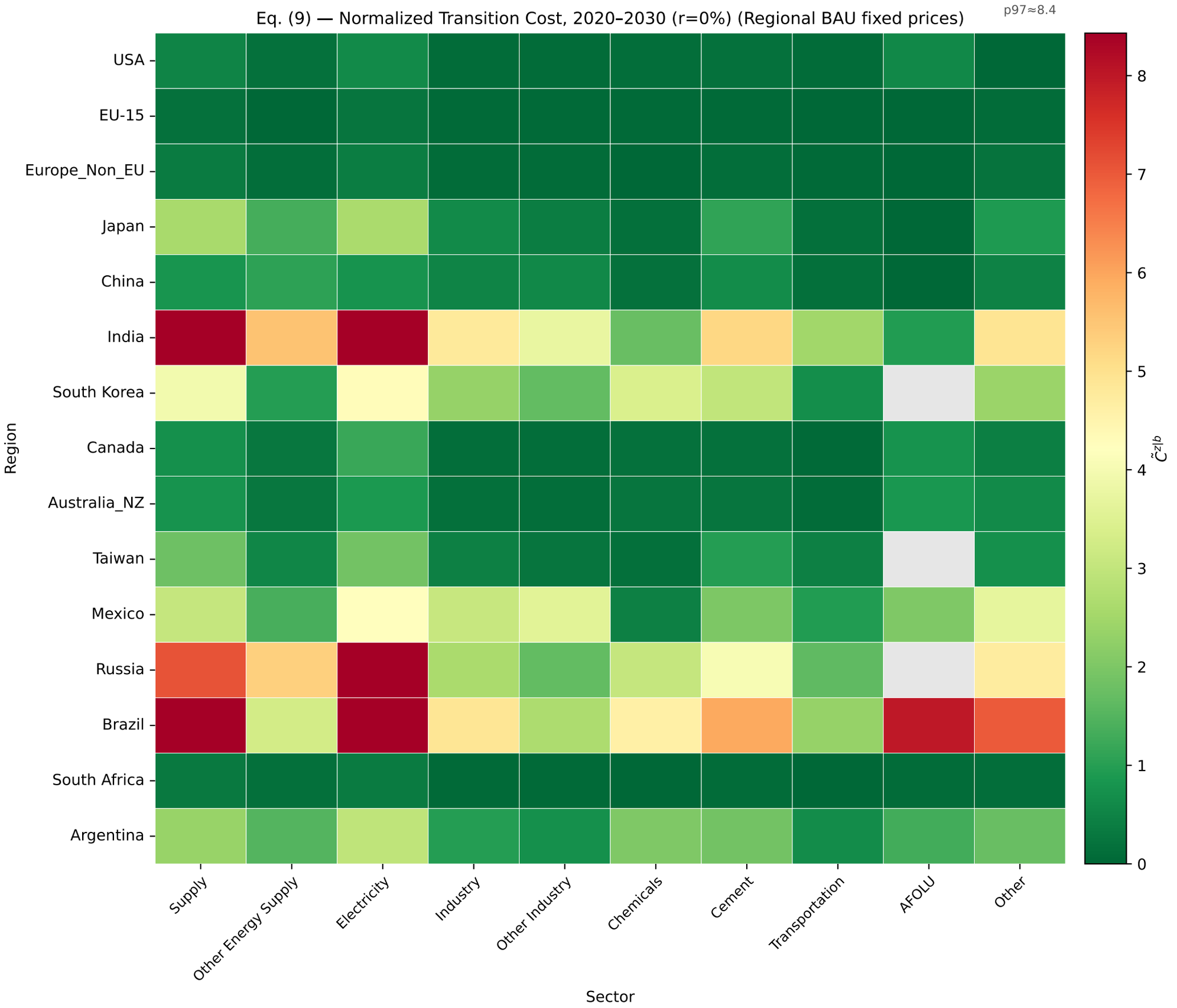
Transition Cost — Eq. (9) Heatmaps (Regional BAU fixed prices)

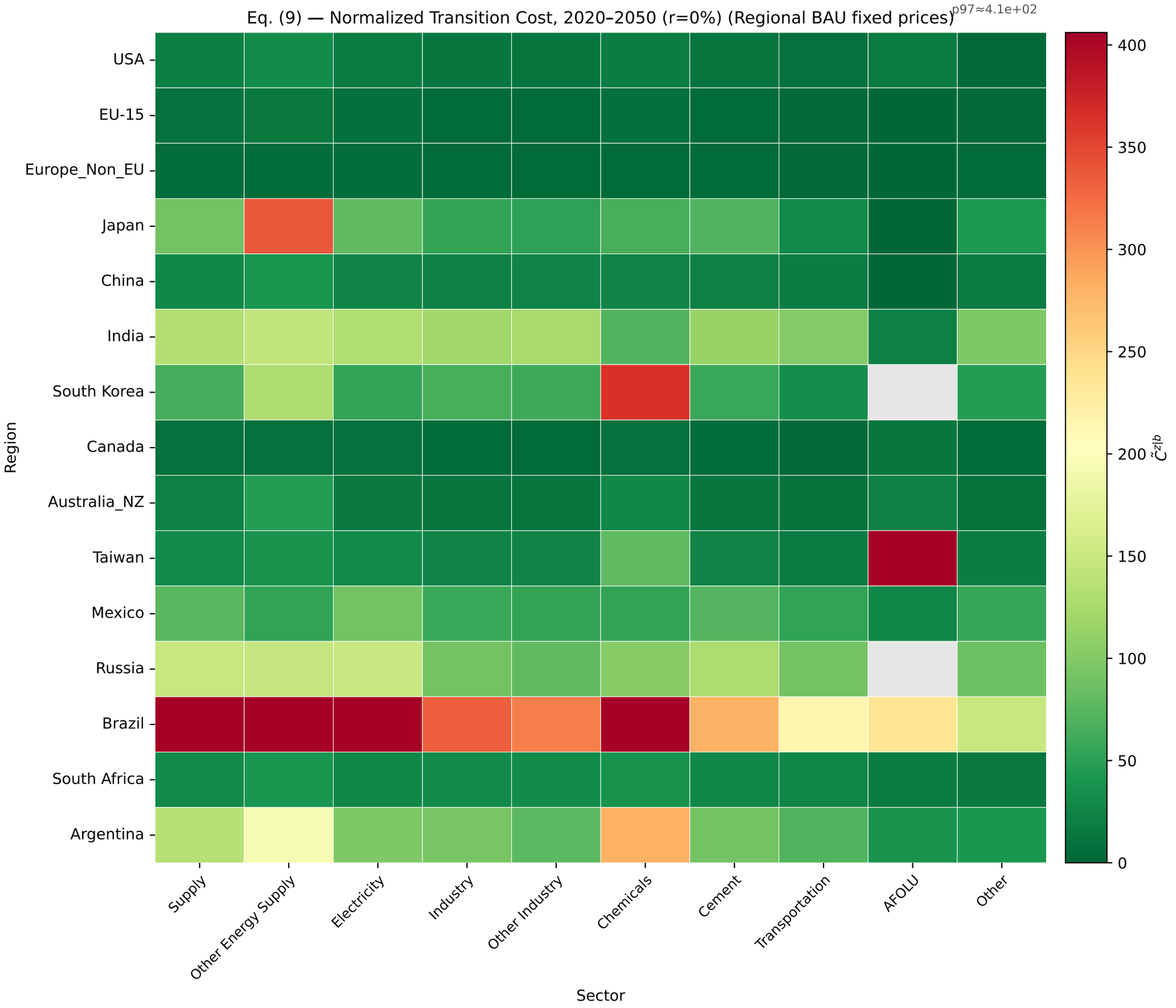
- Eq. (9): $\tilde{C}^{z|b} = \frac{\sum_t D_t P^z_{r,t} (E^b - E^z)_+}{\sum_t D_t P^{b,\text{fixed}}_r E^b}$
- NZ price: region-level Price|Carbon from PRICES_XLSX.
- BAU prices: region-specific fixed values.
- Sectors (NGFS): Supply, Other Energy Supply, Electricity, Industry, Other Industry, Chemicals, Cement, Transportation,
- Horizons: 2020–2030, 2020–2050. Discount rates: 2%, 0% (t0 = 2020).

Inputs: NGFS_GCAM_Carbon_Emissions_Sectors.xlsx, NGFS_GCAM_Price_Carbons.xlsx


Eq. (9) — Normalized Transition Cost, 2020–2030 (r=2%) (Regional BAU fixed prices)
p97≈7.6
Region
USA
EU-15
Europe_Non_EU
Japan
China
India
South Korea
Canada
Australia_NZ
Taiwan
Mexico
Russia
Brazil
South Africa
Argentina
Supply
Other Energy Supply
Electricity
Industry
Other Industry
Chemicals
Cement
Transportation
AFOLU
Other
Sector
$\tilde{C}^{z|b}$
0
1
2
3
4
5
6
7


Eq. (9) — Normalized Transition Cost, 2020–2050 (r=2%) (Regional BAU fixed prices)
p97≈2.7e+02
USA
EU-15
Europe_Non_EU
Japan
China
India
South Korea
Canada
Australia_NZ
Taiwan
Mexico
Russia
Brazil
South Africa
Argentina
Region
Supply
Other Energy Supply
Electricity
Industry
Other Industry
Chemicals
Cement
Transportation
AFOLU
Other
Sector
250
200
150
100
50
0


Eq. (9) — Normalized Transition Cost, 2020–2030 (r=0%) (Regional BAU fixed prices)
p97≈8.4
Region
USA
EU-15
Europe_Non_EU
Japan
China
India
South Korea
Canada
Australia_NZ
Taiwan
Mexico
Russia
Brazil
South Africa
Argentina
Supply
Other Energy Supply
Electricity
Industry
Other Industry
Chemicals
Cement
Transportation
AFOLU
Other
Sector
$\tilde{C}^{z|b}$
0
1
2
3
4
5
6
7
8


Eq. (9) — Normalized Transition Cost, 2020–2050 (r=0%) (Regional BAU fixed prices)
p97≈4.1e+02
Region
USA
EU-15
Europe_Non_EU
Japan
China
India
South Korea
Canada
Australia_NZ
Taiwan
Mexico
Russia
Brazil
South Africa
Argentina
Supply
Other Energy Supply
Electricity
Industry
Other Industry
Chemicals
Cement
Transportation
AFOLU
Other
Sector
400
350
300
250
200
150
100
50
0