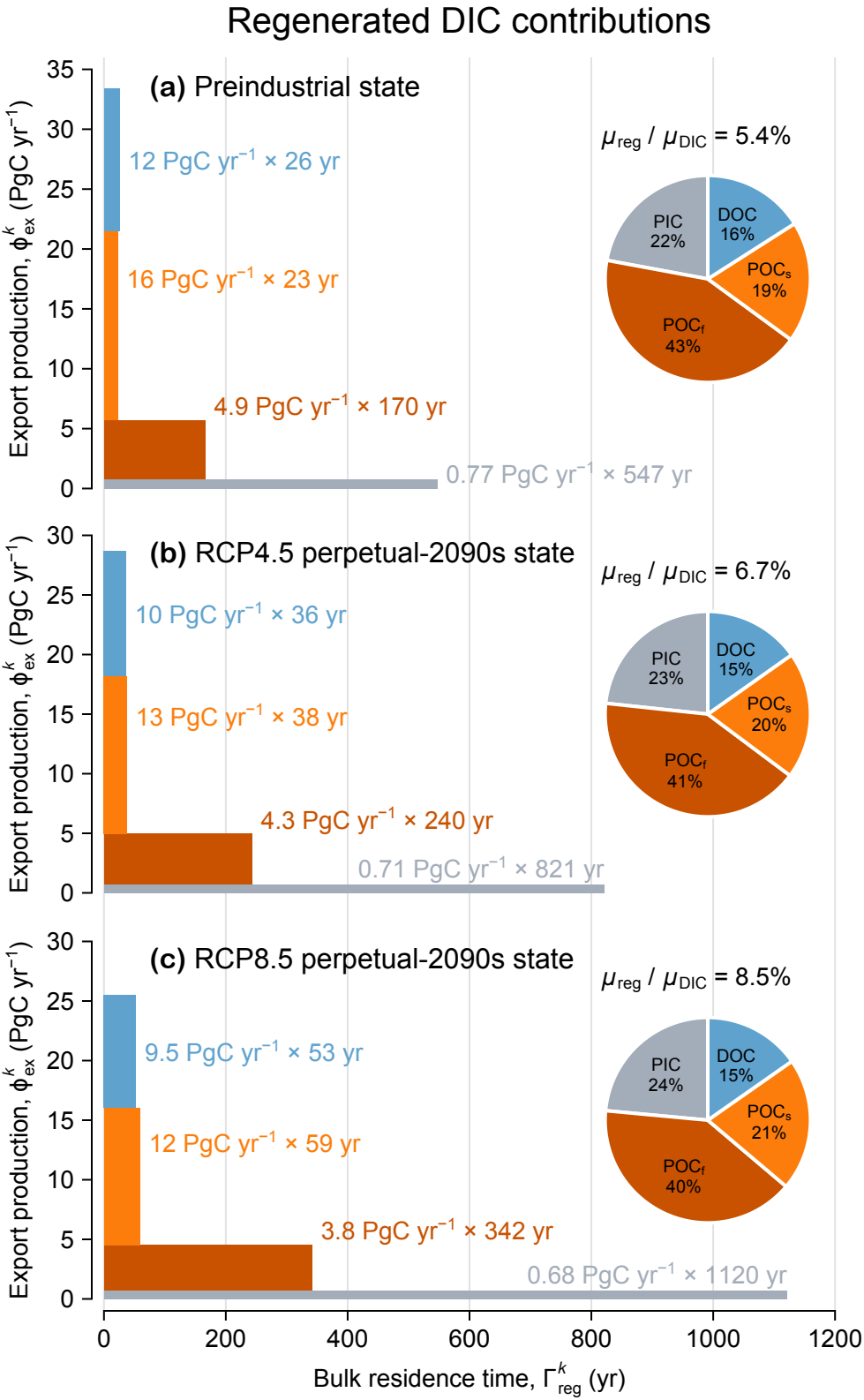
Regenerated DIC contributions
(a) Preindustrial state
12 PgC yr⁻¹ × 26 yr
16 PgC yr⁻¹ × 23 yr
4.9 PgC yr⁻¹ × 170 yr
0.77 PgC yr⁻¹ × 547 yr
μreg / μDIC = 5.4%
PIC 22%
DOC 16%
POCs 19%
POCf 43%
(b) RCP4.5 perpetual-2090s state
10 PgC yr⁻¹ × 36 yr
13 PgC yr⁻¹ × 38 yr
4.3 PgC yr⁻¹ × 240 yr
0.71 PgC yr⁻¹ × 821 yr
μreg / μDIC = 6.7%
PIC 23%
DOC 15%
POCs 20%
POCf 41%
(c) RCP8.5 perpetual-2090s state
9.5 PgC yr⁻¹ × 53 yr
12 PgC yr⁻¹ × 59 yr
3.8 PgC yr⁻¹ × 342 yr
0.68 PgC yr⁻¹ × 1120 yr
μreg / μDIC = 8.5%
PIC 24%
DOC 15%
POCs 21%
POCf 40%
Export production, ϕ^k_ex (PgC yr⁻¹)
Bulk residence time, Γ^k_reg (yr)
0
200
400
600
800
1000
1200