Supplementary Materials

Figure S1 Mechanism of Linyi's IFEITP

Figure S2 The primary typologies of PES mechanism

Table S1 Carbon density parameters in carbon storage module in invest model

Table S2 Ecosystem service payments or receipt amounts for each county (district) of Linyi under the original policy (2019-2021)

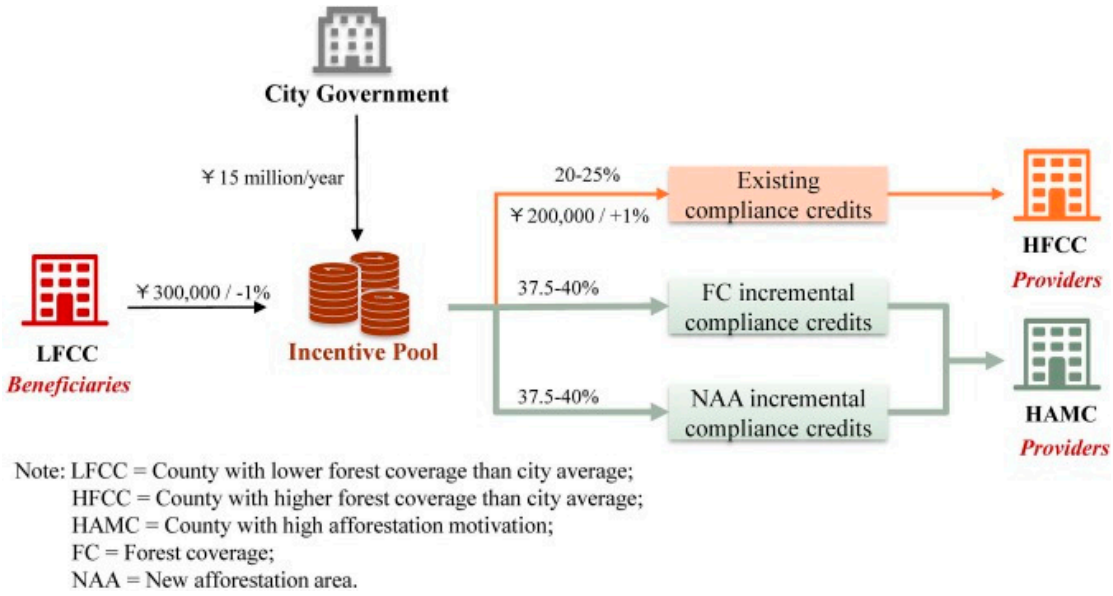

Figure S1 Mechanism of Linyi's IFEITP (Ren et al., 2024)

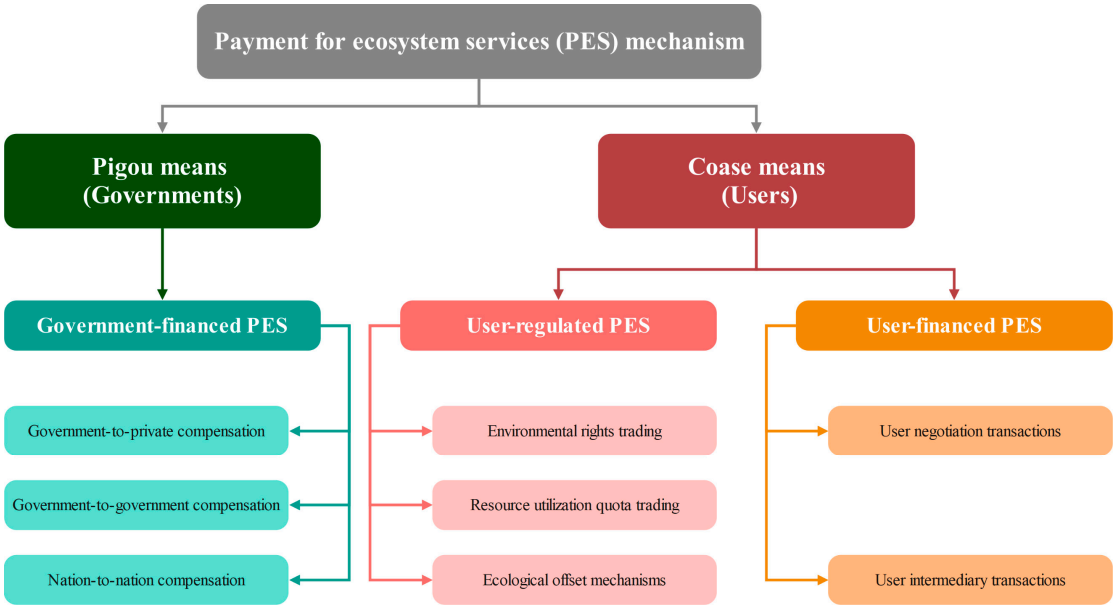

Figure S2 The primary typologies of PES mechanism

Table S1 Carbon density parameters in carbon storage module in invest model (Unit: Mg/ha) (Qin, 2022)

Ecosystem types	C_{soil}	C_{below}	C_{above}	C_{dead}
Cropland	92.9	1.12	5.6	0.56
Woodland	127.3	3.88	19.4	1.94
Grassland	99.7	0.42	2.1	0.21
Water body	81.1	0.12	0.6	0.06
Built-up area	74.6	0.02	0.1	0.01
Unused area	11.7	0.02	0.1	0.01

Table S2 Ecosystem service payments or receipt amounts for each county (district) of Linyi under the original policy (2019-2021) (Unit: 10^4 CNY)

County type	County	2019	2020	2021
ESs supply zone	Mengyin County	589	624	656
	Yishui County	178	229	238
	Pingyi County	131	91	175
	Fei County	98	78	185
ESs payment zone	Junan County	-272	-266	-226
	Lanshan District	-341	-347	-327
	Tancheng County	-205	-247	-373
	Linshu County	-401	-422	-515
	Yinan County	-46	-47	-113
	Hedong District	-421	-489	-435
	Luozhuang District	-379	-395	-431
	Lanling County	-344	-323	-549

Note: Negative numbers represent payments and positive numbers represent receipt amounts

References:

Qin, H.Y., 2022. Land use scenario simulation and ecosystem service prediction in Shandong Province. Shandong University.

Ren, Y.F., Zhang, L.B., Wei, X.X., Song, Y., Wu, S.Y., Wang, H., Chen, X., Qiao, Y.B., Liang, T., 2024. Evaluating and simulating the impact of afforestation policy on land use and ecosystem services trade-offs in Linyi, China. Ecol Indic 160, 111898. https://doi.org/10.1016/j.ecolind.2024.111898.