

**Supplementary Materials: The calculation results of the level-1 indicators for green development in China**

**Table S1.** Calculation Results of Resource Utilization Indicators of Provinces in Eastern China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	0.5923	0.6129	0.6392	0.6730	0.6924	0.7211	0.7453	0.7806
Tianjin	0.5941	0.6222	0.6364	0.6933	0.6970	0.7341	0.7729	0.7925
Hebei	0.4756	0.4955	0.5262	0.5663	0.5812	0.6192	0.6582	0.6760
Shanghai	0.5619	0.6031	0.6360	0.6609	0.6599	0.6921	0.7245	0.7363
Jiangsu	0.4932	0.5224	0.5624	0.6058	0.6304	0.6664	0.7136	0.7402
Zhejiang	0.5218	0.5603	0.5861	0.6120	0.6263	0.6651	0.7011	0.7159
Fujian	0.4229	0.4432	0.4556	0.5245	0.5579	0.6085	0.6503	0.6795
Shandong	0.5842	0.6087	0.6404	0.6869	0.7043	0.7293	0.7590	0.7774
Guangdong	0.4845	0.5343	0.5669	0.5982	0.6191	0.6437	0.6773	0.6950
Hainan	0.5345	0.5373	0.5466	0.5919	0.5994	0.6534	0.6624	0.7361

**Table S2.** Calculation Results of Resource Utilization Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.8081	0.8229	0.8601	0.8768	0.8040	0.8228	0.8559	0.8791
Tianjin	0.8167	0.8313	0.8413	0.8527	0.8423	0.8587	0.8616	0.8546
Hebei	0.7002	0.6973	0.6982	0.7141	0.7129	0.7144	0.7258	0.7279
Shanghai	0.6909	0.7582	0.7500	0.7605	0.7761	0.7757	0.7717	0.7838
Jiangsu	0.7571	0.7600	0.7864	0.7217	0.8180	0.7933	0.8188	0.8142
Zhejiang	0.7341	0.7388	0.7498	0.7725	0.7825	0.7854	0.7969	0.8085
Fujian	0.7078	0.7079	0.7238	0.7560	0.7585	0.7492	0.7600	0.7806
Shandong	0.8082	0.8154	0.8214	0.8286	0.8427	0.8534	0.8525	0.8476
Guangdong	0.7169	0.7251	0.7385	0.7630	0.7739	0.7761	0.7910	0.8041
Hainan	0.7516	0.7463	0.7518	0.7619	0.7742	0.7880	0.7912	0.7945



**Table S3.** Calculation Results of Resource Utilization Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Inner Mongolia	0.2891	0.3336	0.3752	0.4195	0.4474	0.4790	0.5130	0.5268
Guangxi	0.3121	0.3504	0.3999	0.4299	0.4418	0.4903	0.5373	0.5547
Chongqing	0.4467	0.4638	0.4999	0.5451	0.5919	0.6293	0.6813	0.6932
Sichuan	0.4277	0.4620	0.5043	0.5432	0.5496	0.5911	0.6227	0.6393
Guizhou	0.3167	0.2908	0.3157	0.3568	0.3679	0.4047	0.4437	0.4794
Yunnan	0.3687	0.3939	0.4145	0.4500	0.4560	0.4774	0.5139	0.5328
Shaanxi	0.4448	0.4841	0.5292	0.5712	0.5895	0.6333	0.6761	0.6947
Gansu	0.2503	0.2921	0.3373	0.3717	0.3838	0.4270	0.4572	0.4728
Qinghai	0.2145	0.1636	0.2144	0.2827	0.3364	0.3818	0.4221	0.4653
Ningxia	0.2790	0.2240	0.2860	0.3391	0.3671	0.4134	0.4478	0.4620
Xinjiang	0.2682	0.2986	0.3296	0.3602	0.3545	0.4222	0.4454	0.4430

**Table S4.** Calculation Results of Resource Utilization Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.5507	0.5597	0.5558	0.5559	0.5285	0.5236	0.5453	0.5669
Guangxi	0.5756	0.5788	0.5925	0.6187	0.6150	0.6208	0.6167	0.6326
Chongqing	0.7284	0.7426	0.7727	0.7421	0.7406	0.7573	0.7481	0.7988
Sichuan	0.6616	0.6742	0.6797	0.6905	0.7103	0.7084	0.7015	0.7146
Guizhou	0.5459	0.5779	0.6183	0.6435	0.6695	0.6518	0.6658	0.6798
Yunnan	0.5662	0.5689	0.5818	0.5979	0.6091	0.6098	0.6158	0.6169
Shaanxi	0.7192	0.7244	0.7231	0.7372	0.7549	0.7672	0.7829	0.7786
Gansu	0.4973	0.5170	0.5116	0.5217	0.5194	0.5179	0.5208	0.5337
Qinghai	0.4831	0.4961	0.4856	0.5066	0.5126	0.5175	0.5283	0.5491
Ningxia	0.4755	0.4669	0.4767	0.4932	0.4895	0.4862	0.4883	0.4904
Xinjiang	0.4582	0.4695	0.4505	0.4524	0.4585	0.4613	0.4605	0.4597

**Table S5.** Calculation Results of Pollution Control Indicators of Provinces in Eastern China (2005-2012).



	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	0.6328	0.6461	0.6552	0.6766	0.6730	0.6818	0.6024	0.6050
Tianjin	0.5829	0.6033	0.6059	0.6119	0.6181	0.5846	0.5258	0.5233
Hebei	0.1426	0.1386	0.1504	0.1647	0.1753	0.1739	0.0652	0.0734
Shanghai	0.4517	0.4486	0.4515	0.4607	0.4792	0.4876	0.4661	0.4746
Jiangsu	0.1648	0.1673	0.1789	0.1902	0.1978	0.1916	0.1105	0.1182
Zhejiang	0.2899	0.2879	0.2933	0.3078	0.3160	0.3215	0.2323	0.2457
Fujian	0.4043	0.4014	0.4220	0.4245	0.4204	0.4176	0.3197	0.3220
Shandong	0.1849	0.1147	0.1236	0.1329	0.1413	0.1417	0.1035	0.1312
Guangdong	0.1770	0.1787	0.1662	0.1700	0.1846	0.1863	0.1624	0.1029
Hainan	0.9076	0.8957	0.8777	0.8925	0.8873	0.8924	0.7167	0.7770

**Table S6.** Calculation Results of Pollution Control Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.6191	0.6296	0.6495	0.7587	0.8878	0.8777	0.8973	0.8969
Tianjin	0.5267	0.5153	0.5331	0.6449	0.7182	0.7316	0.7527	0.7338
Hebei	0.0695	0.0617	0.0766	0.1630	0.2881	0.2671	0.2975	0.3180
Shanghai	0.4803	0.4736	0.4906	0.5541	0.6891	0.6751	0.6839	0.6985
Jiangsu	0.1161	0.1073	0.1118	0.1726	0.3011	0.2872	0.2977	0.3182
Zhejiang	0.2461	0.2477	0.2607	0.3393	0.4345	0.4571	0.4703	0.5036
Fujian	0.3264	0.3138	0.3263	0.4098	0.4974	0.4797	0.5075	0.5254
Shandong	0.0494	0.0383	0.0412	0.1342	0.2999	0.3152	0.3150	0.3089
Guangdong	0.1092	0.1093	0.1326	0.2030	0.2827	0.2744	0.3056	0.3167
Hainan	0.7690	0.7432	0.7591	0.8817	0.8459	0.8683	0.8889	0.8995

**Table S7.** Calculation Results of Pollution Control Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
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Inner Mongolia	0.2464	0.2607	0.2680	0.2598	0.2636	0.2405	0.1542	0.1496
Guangxi	0.2245	0.2417	0.2605	0.2757	0.2765	0.2843	0.3124	0.3109
Chongqing	0.4335	0.4280	0.4398	0.4421	0.4395	0.4439	0.3922	0.3956
Sichuan	0.2162	0.2254	0.2531	0.2640	0.2642	0.2479	0.1832	0.1906
Guizhou	0.3917	0.3878	0.3915	0.4049	0.3989	0.4216	0.3490	0.3520
Yunnan	0.4581	0.4464	0.4468	0.4513	0.4547	0.4543	0.3276	0.3273
Shaanxi	0.3698	0.3692	0.3727	0.3732	0.3875	0.3812	0.2910	0.2943
Gansu	0.4777	0.4801	0.5085	0.5123	0.5017	0.4916	0.4038	0.4103
Qinghai	0.8152	0.7856	0.7804	0.7719	0.7655	0.7402	0.7033	0.6909
Ningxia	0.5886	0.6196	0.6395	0.6485	0.6517	0.5906	0.5000	0.5074
Xinjiang	0.4599	0.4426	0.4353	0.4275	0.4158	0.4058	0.3101	0.2815

**Table S8.** Calculation Results of Pollution Control Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.1608	0.1538	0.1673	0.3349	0.4914	0.4741	0.4786	0.4831
Guangxi	0.3159	0.3084	0.3044	0.4097	0.4814	0.5144	0.4996	0.4947
Chongqing	0.4067	0.3994	0.3988	0.4889	0.5383	0.5547	0.5576	0.5605
Sichuan	0.1947	0.1877	0.2004	0.2981	0.3748	0.2846	0.3383	0.3720
Guizhou	0.3554	0.3533	0.3705	0.4116	0.4617	0.4940	0.4948	0.5055
Yunnan	0.3306	0.3405	0.3596	0.3988	0.4846	0.4625	0.4963	0.4901
Shaanxi	0.2932	0.2814	0.2964	0.4530	0.5400	0.4842	0.5174	0.5306
Gansu	0.4097	0.3957	0.4055	0.5236	0.5983	0.5774	0.5769	0.5864
Qinghai	0.6851	0.6731	0.6693	0.7283	0.7943	0.8063	0.8058	0.7935
Ningxia	0.5040	0.5066	0.5143	0.6130	0.6690	0.6481	0.6734	0.6986
Xinjiang	0.2663	0.2532	0.2717	0.3802	0.4995	0.4686	0.4894	0.4902

**Table S9.** Calculation Results of Living Environment Indicators of Provinces in Eastern China (2005-2012).

2005	2006	2007	2008	2009	2010	2011	2012
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Beijing	0.6887	0.6654	0.6294	0.6593	0.7249	0.7273	0.7285	0.7312
Tianjin	0.6398	0.6709	0.6699	0.6386	0.6365	0.6559	0.6729	0.6717
Hebei	0.5633	0.5689	0.5771	0.6029	0.6256	0.6512	0.6496	0.6531
Shanghai	0.6355	0.6980	0.7010	0.7016	0.6990	0.7003	0.7013	0.7029
Jiangsu	0.6367	0.6539	0.6715	0.6874	0.6936	0.6996	0.7081	0.7123
Zhejiang	0.6498	0.6565	0.6643	0.6775	0.6897	0.6899	0.6958	0.7051
Fujian	0.6400	0.6461	0.6566	0.6748	0.6849	0.6997	0.7098	0.7165
Shandong	0.6318	0.6535	0.6677	0.6729	0.6874	0.6971	0.7020	0.7088
Guangdong	0.5989	0.6738	0.6814	0.6945	0.6998	0.7078	0.7097	0.7121
Hainan	0.6013	0.6294	0.6426	0.6313	0.6709	0.6891	0.6873	0.6594

**Table S10.** Calculation Results of Living Environment Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.6985	0.7003	0.7218	0.7637	0.7679	0.7625	0.7702	0.7780
Tianjin	0.6085	0.6286	0.6529	0.6625	0.6538	0.6473	0.6467	0.6462
Hebei	0.4727	0.5553	0.6291	0.6310	0.6250	0.6174	0.6198	0.6222
Shanghai	0.6812	0.6877	0.6834	0.6914	0.6931	0.6969	0.6978	0.6987
Jiangsu	0.6821	0.6825	0.7004	0.7047	0.7113	0.7185	0.7228	0.7272
Zhejiang	0.6753	0.6809	0.6910	0.6999	0.7001	0.7067	0.7101	0.7135
Fujian	0.7187	0.7138	0.7229	0.7269	0.7279	0.7490	0.7567	0.7644
Shandong	0.5877	0.6236	0.6380	0.6638	0.6710	0.6555	0.6746	0.6637
Guangdong	0.6923	0.6994	0.7077	0.7131	0.7154	0.7314	0.7369	0.7424
Hainan	0.6991	0.6986	0.6853	0.6983	0.7037	0.7212	0.7286	0.7361

**Table S11.** Calculation Results of Living Environment Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
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Inner Mongolia	0.4570	0.4731	0.4887	0.5240	0.5457	0.5630	0.5895	0.6104
Guangxi	0.6190	0.5759	0.5773	0.5907	0.6125	0.6314	0.6543	0.6691
Chongqing	0.4389	0.4767	0.5523	0.5913	0.6177	0.6459	0.6583	0.6795
Sichuan	0.5143	0.5409	0.5709	0.5871	0.6207	0.6469	0.6540	0.6544
Guizhou	0.4660	0.4878	0.5083	0.5206	0.5058	0.5286	0.5598	0.5765
Yunnan	0.5415	0.5499	0.5862	0.5808	0.6301	0.6424	0.6502	0.6606
Shaanxi	0.4849	0.5375	0.5489	0.5705	0.5844	0.5964	0.6122	0.6260
Gansu	0.4923	0.4648	0.5065	0.5272	0.5245	0.5250	0.5567	0.5844
Qinghai	0.5365	0.5015	0.5184	0.5312	0.5428	0.5907	0.6064	0.6224
Ningxia	0.4604	0.4991	0.5479	0.5898	0.6084	0.6443	0.6433	0.6537
Xinjiang	0.5089	0.4985	0.5191	0.5269	0.5680	0.5864	0.6198	0.6330

**Table S12.** Calculation Results of Living Environment Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.5718	0.6137	0.6460	0.6679	0.6714	0.6763	0.6742	0.6821
Guangxi	0.6591	0.6776	0.6816	0.6858	0.6987	0.6656	0.6672	0.6718
Chongqing	0.6346	0.6470	0.6643	0.6694	0.6606	0.6549	0.6613	0.6576
Sichuan	0.5900	0.6325	0.6430	0.6556	0.6677	0.6654	0.6756	0.6659
Guizhou	0.5787	0.5897	0.6299	0.6457	0.6588	0.6672	0.6727	0.6783
Yunnan	0.6468	0.6590	0.6577	0.6642	0.6825	0.6936	0.7045	0.7055
Shaanxi	0.5593	0.5701	0.6197	0.5975	0.5675	0.5652	0.5715	0.5773
Gansu	0.5674	0.5887	0.5919	0.6088	0.6160	0.6024	0.6241	0.6158
Qinghai	0.5758	0.6031	0.6003	0.6063	0.6265	0.6196	0.6089	0.6283
Ningxia	0.6347	0.6369	0.6512	0.6588	0.6616	0.6678	0.6622	0.6796
Xinjiang	0.6039	0.6230	0.6386	0.6348	0.6430	0.6466	0.6521	0.6423

**Table S13.** Calculation Results of Ecological Protection Indicators of Provinces in Eastern China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	0.4762	0.4753	0.4765	0.4783	0.5044	0.5030	0.5062	0.5103



Tianjin	0.5345	0.5303	0.5368	0.5460	0.5601	0.5028	0.4980	0.4930
Hebei	0.4763	0.4678	0.4666	0.4824	0.4912	0.4912	0.4916	0.5132
Shanghai	0.5336	0.5360	0.4921	0.5159	0.6290	0.5161	0.5086	0.5070
Jiangsu	0.5377	0.5242	0.5150	0.5081	0.5277	0.4975	0.4927	0.4927
Zhejiang	0.5055	0.5008	0.4994	0.4924	0.5134	0.4863	0.4925	0.4931
Fujian	0.5496	0.5419	0.5445	0.5443	0.5458	0.5509	0.5696	0.5582
Shandong	0.5487	0.5477	0.5497	0.5553	0.5698	0.5431	0.5430	0.5377
Guangdong	0.5717	0.5624	0.5607	0.5699	0.5833	0.6341	0.6343	0.6318
Hainan	0.5831	0.5808	0.5758	0.5784	0.5847	0.6095	0.6070	0.6113

**Table S14.** Calculation Results of Ecological Protection Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.5448	0.5395	0.5422	0.5417	0.5462	0.5606	0.5676	0.5747
Tianjin	0.5471	0.5502	0.5482	0.5500	0.5516	0.5431	0.5543	0.5655
Hebei	0.5166	0.5197	0.5235	0.5540	0.5398	0.5497	0.5564	0.5731
Shanghai	0.4982	0.5013	0.5576	0.5617	0.5529	0.5389	0.5399	0.5410
Jiangsu	0.5521	0.5511	0.5457	0.5427	0.5440	0.5419	0.5442	0.5465
Zhejiang	0.4626	0.4621	0.4785	0.4760	0.4740	0.4651	0.4619	0.4587
Fujian	0.5531	0.5450	0.5764	0.5732	0.5739	0.5633	0.5658	0.5783
Shandong	0.5430	0.5436	0.5452	0.5341	0.5334	0.5453	0.5338	0.5523
Guangdong	0.6587	0.6603	0.6903	0.6786	0.6742	0.7059	0.7176	0.7294
Hainan	0.6160	0.6120	0.6195	0.6158	0.6147	0.6278	0.6317	0.6355

**Table S15.** Calculation Results of Ecological Protection Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Inner Mongolia	0.6887	0.6685	0.7080	0.7238	0.6916	0.7271	0.7352	0.7396
Guangxi	0.5741	0.5687	0.5690	0.5701	0.5999	0.6020	0.6027	0.6028



Chongqing	0.3936	0.3809	0.3927	0.3951	0.4218	0.4347	0.4369	0.4316
Sichuan	0.7350	0.7215	0.7450	0.7645	0.7677	0.7607	0.7492	0.7342
Guizhou	0.3981	0.3963	0.4085	0.4093	0.4351	0.4312	0.4307	0.4241
Yunnan	0.5657	0.5600	0.5784	0.5742	0.6077	0.6083	0.6042	0.5938
Shaanxi	0.4964	0.5019	0.5086	0.5132	0.5481	0.5457	0.5421	0.5414
Gansu	0.6034	0.5997	0.6005	0.5646	0.5981	0.5982	0.5923	0.5906
Qinghai	0.6211	0.6086	0.6289	0.5619	0.6454	0.6421	0.6494	0.6443
Ningxia	0.4785	0.4689	0.4719	0.4770	0.5059	0.5070	0.5115	0.5122
Xinjiang	0.4382	0.4315	0.4377	0.4509	0.4493	0.4330	0.4280	0.4271

**Table S16.** Calculation Results of Ecological Protection Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.7663	0.7413	0.7493	0.7405	0.7469	0.7670	0.7730	0.7790
Guangxi	0.6195	0.6186	0.6176	0.6170	0.6148	0.6215	0.6363	0.6310
Chongqing	0.6089	0.6039	0.6086	0.6058	0.6021	0.6088	0.6121	0.6154
Sichuan	0.7729	0.7699	0.7924	0.8068	0.8145	0.8062	0.8122	0.8182
Guizhou	0.5134	0.5107	0.5346	0.5340	0.5599	0.5611	0.5755	0.5899
Yunnan	0.6436	0.6312	0.6473	0.6389	0.6278	0.6551	0.6621	0.6690
Shaanxi	0.5610	0.5598	0.5624	0.5515	0.5565	0.5772	0.5809	0.5863
Gansu	0.6107	0.6161	0.6620	0.6627	0.6621	0.6543	0.6601	0.6669
Qinghai	0.6873	0.6848	0.6824	0.6903	0.6927	0.7071	0.7154	0.7237
Ningxia	0.5275	0.5248	0.4984	0.5001	0.4979	0.5105	0.5077	0.5068
Xinjiang	0.4955	0.4936	0.5129	0.5107	0.5133	0.5156	0.5230	0.5305

**Table S17.** Calculation Results of Circular Economy Indicators of Provinces in Eastern China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	0.8511	0.8538	0.7892	0.8204	0.8233	0.7908	0.8276	0.8563
Tianjin	0.8032	0.8183	0.8211	0.8172	0.8353	0.8477	0.8426	0.8211



Hebei	0.7998	0.7946	0.7934	0.8062	0.8025	0.8194	0.8128	0.8231
Shanghai	0.8750	0.8702	0.8662	0.8645	0.8635	0.8621	0.8624	0.9043
Jiangsu	0.8844	0.8785	0.8812	0.8877	0.9342	0.8836	0.9342	0.9260
Zhejiang	0.8868	0.8726	0.8820	0.8785	0.8762	0.9273	0.8769	0.9315
Fujian	0.8368	0.8873	0.8855	0.8873	0.8907	0.8909	0.8856	0.8798
Shandong	0.8925	0.9414	0.8929	0.8872	0.8866	0.8855	0.8813	0.9305
Guangdong	0.8742	0.9024	0.9207	0.9227	0.9168	0.9159	0.9063	0.9078
Hainan	0.7905	0.8029	0.8145	0.8185	0.8553	0.8578	0.8196	0.8506

**Table S18.** Calculation Results of Circular Economy Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.8580	0.8445	0.8346	0.8370	0.8320	0.8556	0.8592	0.8710
Tianjin	0.8425	0.8562	0.8588	0.8645	0.8371	0.8652	0.8544	0.8976
Hebei	0.8252	0.8159	0.8352	0.8321	0.8141	0.8207	0.8267	0.8205
Shanghai	0.8897	0.8594	0.8867	0.8828	0.9094	0.9002	0.9055	0.9183
Jiangsu	0.9328	0.9308	0.9280	0.9201	0.9244	0.9123	0.9253	0.9289
Zhejiang	0.9387	0.9249	0.9249	0.9266	0.9185	0.9257	0.9270	0.9346
Fujian	0.8839	0.8757	0.8561	0.8343	0.8590	0.8564	0.8859	0.8987
Shandong	0.9300	0.9265	0.9223	0.9117	0.8935	0.9050	0.9216	0.9377
Guangdong	0.8909	0.8841	0.8926	0.8886	0.8671	0.8948	0.8971	0.9092
Hainan	0.8581	0.8680	0.8716	0.8694	0.8726	0.8849	0.8670	0.8751

**Table S19.** Calculation Results of Circular Economy Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Inner Mongolia	0.4881	0.5121	0.5157	0.5546	0.5120	0.5561	0.4851	0.5298
Guangxi	0.5225	0.5127	0.5360	0.5662	0.5782	0.5793	0.5548	0.5753



Chongqing	0.3886	0.4034	0.4415	0.4960	0.4408	0.5209	0.6419	0.5425
Sichuan	0.5201	0.5501	0.5345	0.5536	0.5466	0.5336	0.5228	0.5115
Guizhou	0.5589	0.6016	0.4885	0.5146	0.4952	0.5095	0.5301	0.5421
Yunnan	0.4636	0.5802	0.4557	0.6111	0.5883	0.5733	0.5025	0.4175
Shaanxi	0.4470	0.5097	0.5056	0.5291	0.5617	0.5611	0.5683	0.5723
Gansu	0.4371	0.4095	0.5179	0.5045	0.5153	0.4846	0.4987	0.4622
Qinghai	0.5453	0.5467	0.5569	0.5481	0.5350	0.5431	0.5579	0.5523
Ningxia	0.5067	0.5485	0.5583	0.5565	0.5405	0.5431	0.5535	0.5554
Xinjiang	0.4299	0.4375	0.4570	0.4572	0.4229	0.4415	0.4573	0.4548

**Table S20.** Calculation Results of Circular Economy Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.5878	0.6017	0.5655	0.5652	0.4984	0.5325	0.5297	0.5211
Guangxi	0.6331	0.6149	0.6103	0.6062	0.5868	0.5838	0.5733	0.5811
Chongqing	0.5937	0.5877	0.5853	0.5734	0.5494	0.5693	0.5391	0.5378
Sichuan	0.5418	0.5333	0.5371	0.5280	0.5320	0.5233	0.5562	0.5675
Guizhou	0.5711	0.5765	0.5822	0.5559	0.5163	0.5623	0.5644	0.5539
Yunnan	0.4768	0.5541	0.5768	0.5729	0.5446	0.5779	0.5145	0.5969
Shaanxi	0.6176	0.6210	0.6451	0.6223	0.5182	0.5815	0.6039	0.5667
Gansu	0.5323	0.5160	0.5042	0.5073	0.5009	0.5172	0.5138	0.5228
Qinghai	0.6148	0.6108	0.6306	0.6119	0.6333	0.6342	0.6447	0.6489
Ningxia	0.5834	0.5878	0.5929	0.4793	0.4516	0.5169	0.5397	0.5334
Xinjiang	0.5099	0.5145	0.5214	0.5051	0.5221	0.5519	0.5530	0.5626

**Table S21.** Calculation Results of Economic Growth Quality Indicators of Provinces in Eastern China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	0.6001	0.6292	0.6558	0.6774	0.6947	0.7122	0.7335	0.7517
Tianjin	0.4380	0.4560	0.4783	0.4942	0.5472	0.5785	0.6096	0.6374



Hebei	0.2886	0.3124	0.3384	0.3572	0.3840	0.4062	0.4307	0.4547
Shanghai	0.5602	0.5824	0.6190	0.6395	0.6699	0.6865	0.7096	0.7314
Jiangsu	0.4127	0.4480	0.4906	0.5288	0.5578	0.6060	0.6506	0.6871
Zhejiang	0.4470	0.4712	0.4989	0.5171	0.5403	0.5688	0.5960	0.6219
Fujian	0.3770	0.4004	0.4295	0.4504	0.4765	0.4936	0.5196	0.5422
Shandong	0.3264	0.3563	0.3927	0.4208	0.4482	0.4844	0.5250	0.5626
Guangdong	0.4863	0.5153	0.5463	0.5717	0.5993	0.6346	0.6661	0.6930
Hainan	0.2669	0.2854	0.3148	0.3455	0.3873	0.4254	0.4565	0.4916

**Table S22.** Calculation Results of Economic Growth Quality Indicators of Provinces in Eastern China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	0.7727	0.7899	0.8062	0.8227	0.8099	0.8067	0.8151	0.8236
Tianjin	0.6541	0.6753	0.6967	0.7243	0.7421	0.7315	0.7382	0.7348
Hebei	0.4723	0.4969	0.5254	0.5463	0.5724	0.5937	0.5871	0.5605
Shanghai	0.7507	0.7733	0.7947	0.8150	0.7654	0.8023	0.8127	0.8230
Jiangsu	0.7120	0.7383	0.7623	0.7836	0.7954	0.7725	0.7959	0.7993
Zhejiang	0.6485	0.6734	0.6978	0.7202	0.7439	0.7412	0.7462	0.7613
Fujian	0.5558	0.5757	0.6021	0.6271	0.6553	0.6726	0.6750	0.6974
Shandong	0.5893	0.6216	0.6484	0.6700	0.6875	0.6979	0.7094	0.7108
Guangdong	0.7128	0.7375	0.7620	0.7096	0.7221	0.7379	0.7610	0.7722
Hainan	0.5132	0.5464	0.5667	0.5852	0.6070	0.6058	0.6079	0.6293

**Table S23.** Calculation Results of Economic Growth Quality Indicators of Provinces in Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Inner Mongolia	0.3080	0.3283	0.3512	0.3711	0.4174	0.4289	0.4551	0.4791
Guangxi	0.2758	0.2928	0.3226	0.3455	0.3632	0.3776	0.3961	0.4270



Chongqing	0.3213	0.3434	0.3605	0.3893	0.3902	0.4084	0.4441	0.4895
Sichuan	0.2797	0.2984	0.3261	0.3448	0.3744	0.3920	0.4175	0.4512
Guizhou	0.2859	0.2373	0.2818	0.3168	0.3669	0.3885	0.4281	0.4501
Yunnan	0.2454	0.2638	0.2962	0.3273	0.3527	0.3745	0.4134	0.4352
Shaanxi	0.2579	0.2694	0.2981	0.3225	0.3726	0.3899	0.4123	0.4360
Gansu	0.2288	0.2447	0.2634	0.2930	0.3141	0.3283	0.3654	0.3972
Qinghai	0.2443	0.1778	0.2170	0.2254	0.2667	0.2986	0.3092	0.3593
Ningxia	0.2254	0.2287	0.2650	0.2947	0.3474	0.3728	0.4019	0.4210
Xinjiang	0.2184	0.2085	0.2527	0.2587	0.2894	0.3036	0.3452	0.3447

**Table S24.** Calculation Results of Economic Growth Quality Indicators of Provinces in Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Inner Mongolia	0.5079	0.5397	0.5552	0.5826	0.6138	0.6360	0.6616	0.6672
Guangxi	0.4557	0.4840	0.5044	0.5240	0.5586	0.5625	0.5757	0.5790
Chongqing	0.5177	0.5656	0.5886	0.6117	0.6313	0.6578	0.6651	0.6725
Sichuan	0.4831	0.5203	0.5566	0.5916	0.6175	0.6356	0.6642	0.6829
Guizhou	0.4705	0.4822	0.5031	0.5194	0.5374	0.5410	0.5461	0.5612
Yunnan	0.4622	0.4845	0.5082	0.5315	0.5516	0.5572	0.5635	0.5897
Shaanxi	0.4604	0.4911	0.5251	0.5494	0.5659	0.5794	0.5862	0.5831
Gansu	0.4311	0.4642	0.5004	0.5226	0.5449	0.5710	0.5788	0.5866
Qinghai	0.3909	0.4360	0.4849	0.5093	0.5391	0.5421	0.5462	0.5519
Ningxia	0.4407	0.4680	0.5140	0.5375	0.5584	0.5740	0.5831	0.6021
Xinjiang	0.3912	0.4401	0.5074	0.5247	0.5434	0.5613	0.5707	0.5905

**Table S25.** Comprehensive Evaluation Results of Green Development Levels of Provinces in Eastern and Western China (2005-2012).

	2005	2006	2007	2008	2009	2010	2011	2012
Beijing	3.8412	3.8827	3.8453	3.9850	4.1127	4.1362	4.1435	4.2351
Tianjin	3.5925	3.7010	3.7484	3.8012	3.8942	3.9036	3.9218	3.9390
Hebei	2.7462	2.7778	2.8521	2.9797	3.0598	3.1611	3.1081	3.1935



Shanghai	3.6179	3.7383	3.7658	3.8431	4.0005	3.9447	3.9725	4.0565
Jiangsu	3.1295	3.1943	3.2996	3.4080	3.5415	3.5447	3.6097	3.6765
Zhejiang	3.3008	3.3493	3.4240	3.4853	3.5619	3.6589	3.5946	3.7132
Fujian	3.2306	3.3203	3.3937	3.5058	3.5762	3.6612	3.6546	3.6982
Shandong	3.1685	3.2223	3.2670	3.3560	3.4376	3.4811	3.5138	3.6482
Guangdong	3.1926	3.3669	3.4422	3.5270	3.6029	3.7224	3.7561	3.7426
Hainan	3.6839	3.7315	3.7720	3.8581	3.9849	4.1276	3.9495	4.1260
Inner Mongolia	2.4773	2.5763	2.7068	2.8528	2.8777	2.9946	2.9321	3.0353
Guangxi	2.5280	2.5422	2.6653	2.7781	2.8721	2.9649	3.0576	3.1398
Chongqing	2.4226	2.4962	2.6867	2.8589	2.9019	3.0831	3.2547	3.2319
Sichuan	2.6930	2.7983	2.9339	3.0572	3.1232	3.1722	3.1494	3.1812
Guizhou	2.4173	2.4016	2.3943	2.5230	2.5698	2.6841	2.7414	2.8242
Yunnan	2.6430	2.7942	2.7778	2.9947	3.0895	3.1302	3.0118	2.9672
Shaanxi	2.5008	2.6718	2.7631	2.8797	3.0438	3.1076	3.1020	3.1647
Gansu	2.4896	2.4909	2.7341	2.7733	2.8375	2.8547	2.8741	2.9175
Qinghai	2.9769	2.7838	2.9160	2.9212	3.0918	3.1965	3.2483	3.3345
Ningxia	2.5386	2.5888	2.7686	2.9056	3.0210	3.0712	3.0580	3.1117
Xinjiang	2.3235	2.3172	2.4314	2.4814	2.4999	2.5925	2.6058	2.5841

**Table S26.** Comprehensive Evaluation Results of Green Development Levels of Provinces in Eastern and Western China (2013-2020).

	2013	2014	2015	2016	2017	2018	2019	2020
Beijing	4.3012	4.3267	4.4144	4.6006	4.6478	4.6859	4.7653	4.8233
Tianjin	3.9956	4.0569	4.1310	4.2989	4.3451	4.3774	4.4079	4.4325
Hebei	3.0565	3.1468	3.2880	3.4405	3.5523	3.5630	3.6133	3.6222
Shanghai	3.9910	4.0535	4.1630	4.2655	4.3860	4.3891	4.4115	4.4633



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Jiangsu	3.7522	3.7700	3.8346	3.8454	4.0942	4.0257	4.1047	4.1343
Zhejiang	3.7053	3.7278	3.8027	3.9345	4.0535	4.0812	4.1124	4.1802
Fujian	3.7457	3.7319	3.8076	3.9273	4.0720	4.0702	4.1509	4.2448
Shandong	3.5076	3.5690	3.6165	3.7424	3.9280	3.9723	4.0069	4.0210
Guangdong	3.7808	3.8157	3.9237	3.9559	4.0354	4.1205	4.2092	4.2740
Hainan	4.2070	4.2145	4.2540	4.4123	4.4181	4.4960	4.5153	4.5700
Inner Mongolia	3.1453	3.2099	3.2391	3.4470	3.5504	3.6095	3.6624	3.6994
Guangxi	3.2589	3.2823	3.3108	3.4614	3.5553	3.5686	3.5688	3.5902
Chongqing	3.4900	3.5462	3.6183	3.6913	3.7223	3.8028	3.7833	3.8426
Sichuan	3.2441	3.3179	3.4092	3.5706	3.7168	3.6235	3.7480	3.8211
Guizhou	3.0350	3.0903	3.2386	3.3101	3.4036	3.4774	3.5193	3.5686
Yunnan	3.1262	3.2382	3.3314	3.4042	3.5002	3.5561	3.5567	3.6681
Shaanxi	3.2107	3.2478	3.3718	3.5109	3.5030	3.5547	3.6428	3.6226
Gansu	3.0485	3.0977	3.1756	3.3467	3.4416	3.4402	3.4745	3.5122
Qinghai	3.4370	3.5039	3.5531	3.6527	3.7985	3.8268	3.8493	3.8954
Ningxia	3.1658	3.1910	3.2475	3.2819	3.3280	3.4035	3.4544	3.5109
Xinjiang	2.7250	2.7939	2.9025	3.0079	3.1798	3.2053	3.2487	3.2758

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