Why and how does the local government respond to the climate policy?

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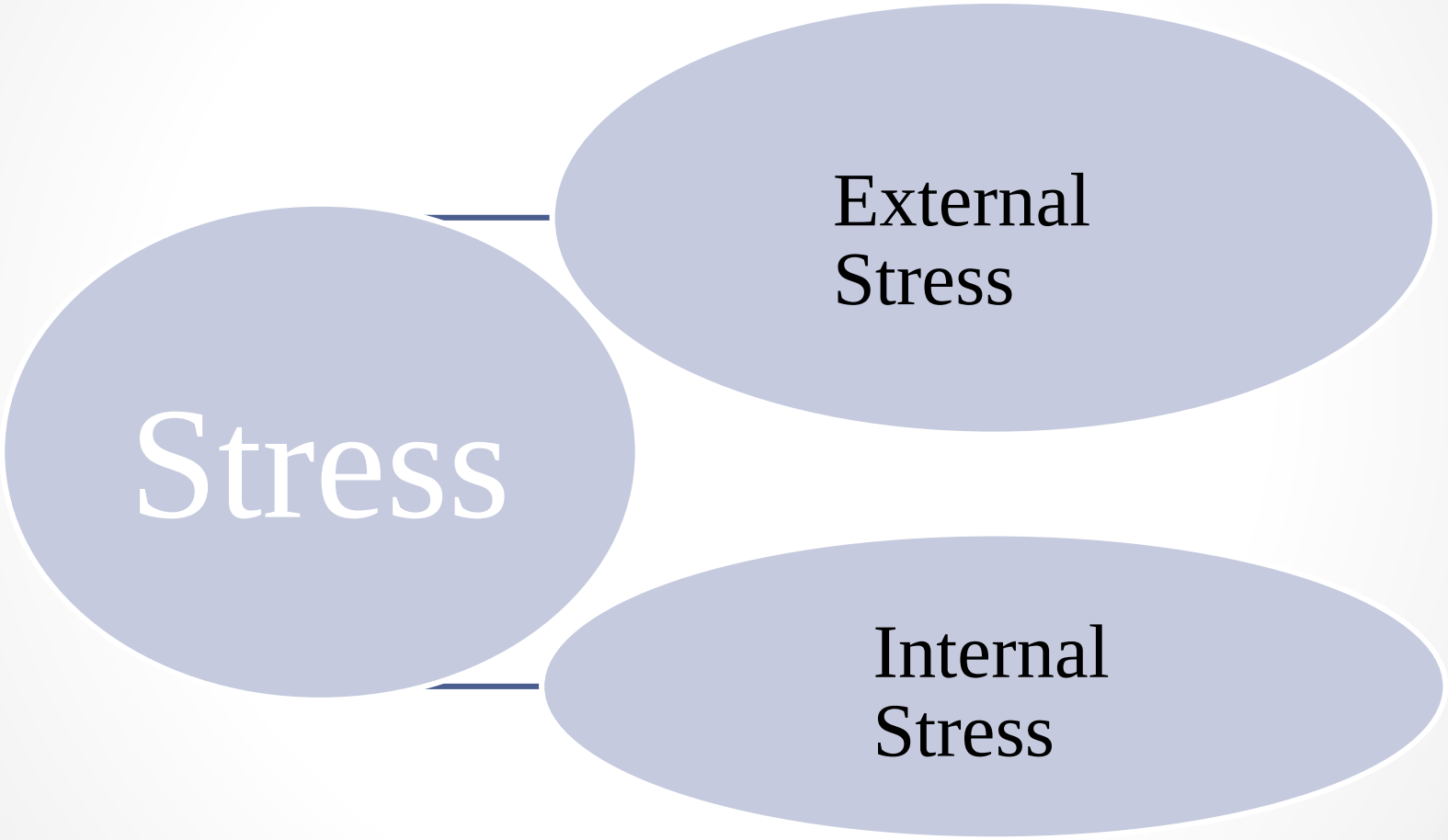
Contents

- Reasons to respond to climate policy and push forward the air pollution control policy
- Relations between climate policy and air pollution control policy
- How does Chinese governmental system respond to the policy
- Policies related to low-carbon development from the environmental departments

I. Reasons



External Stress

✓Paris Climate Treaty

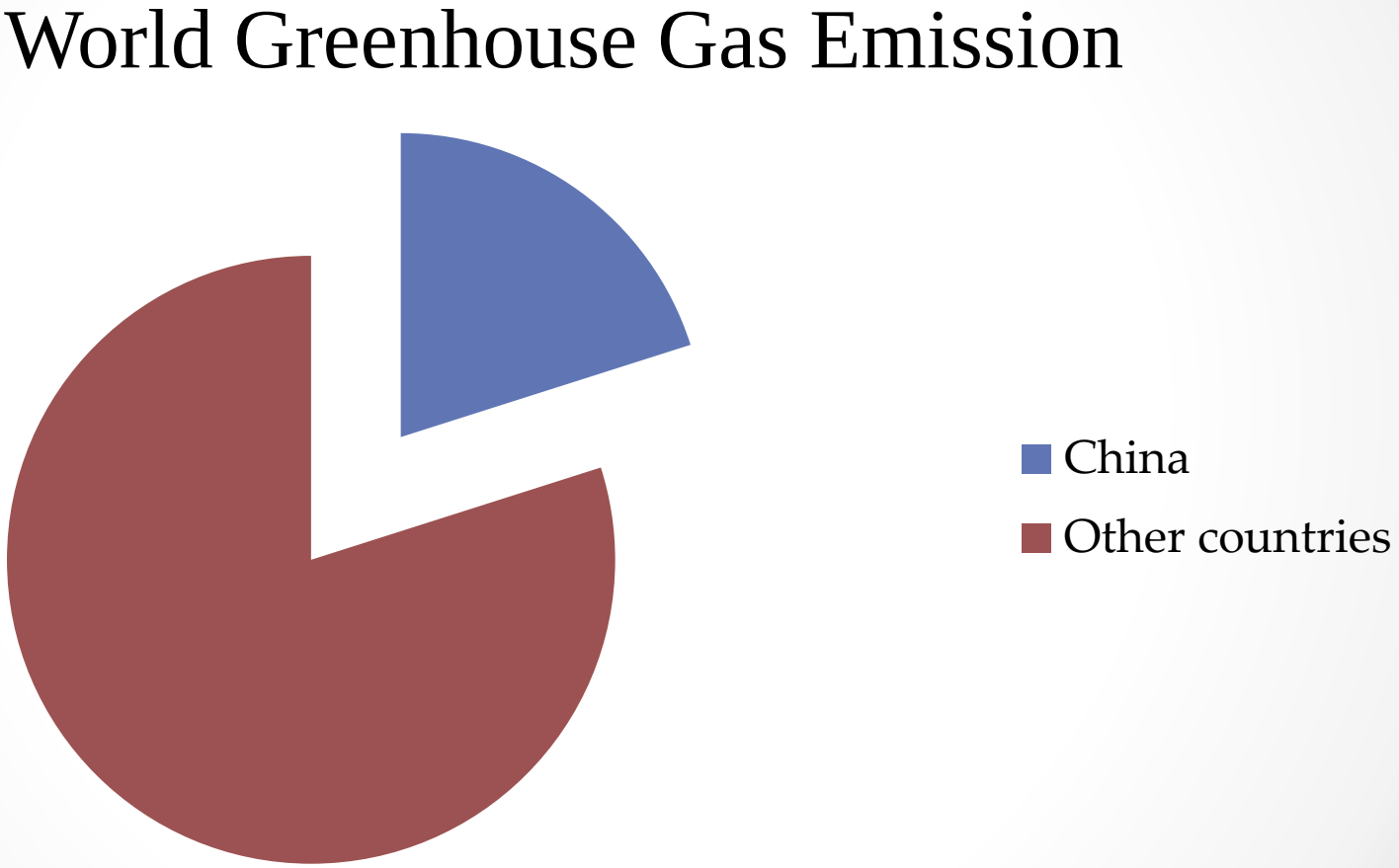
- Came into effect on Nov. 4th, 2016
- Aim--"enhancing the implementation" of the UNFCCC through

(a) Holding the increase in the global average temperature to well below 2 ° C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 ° C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

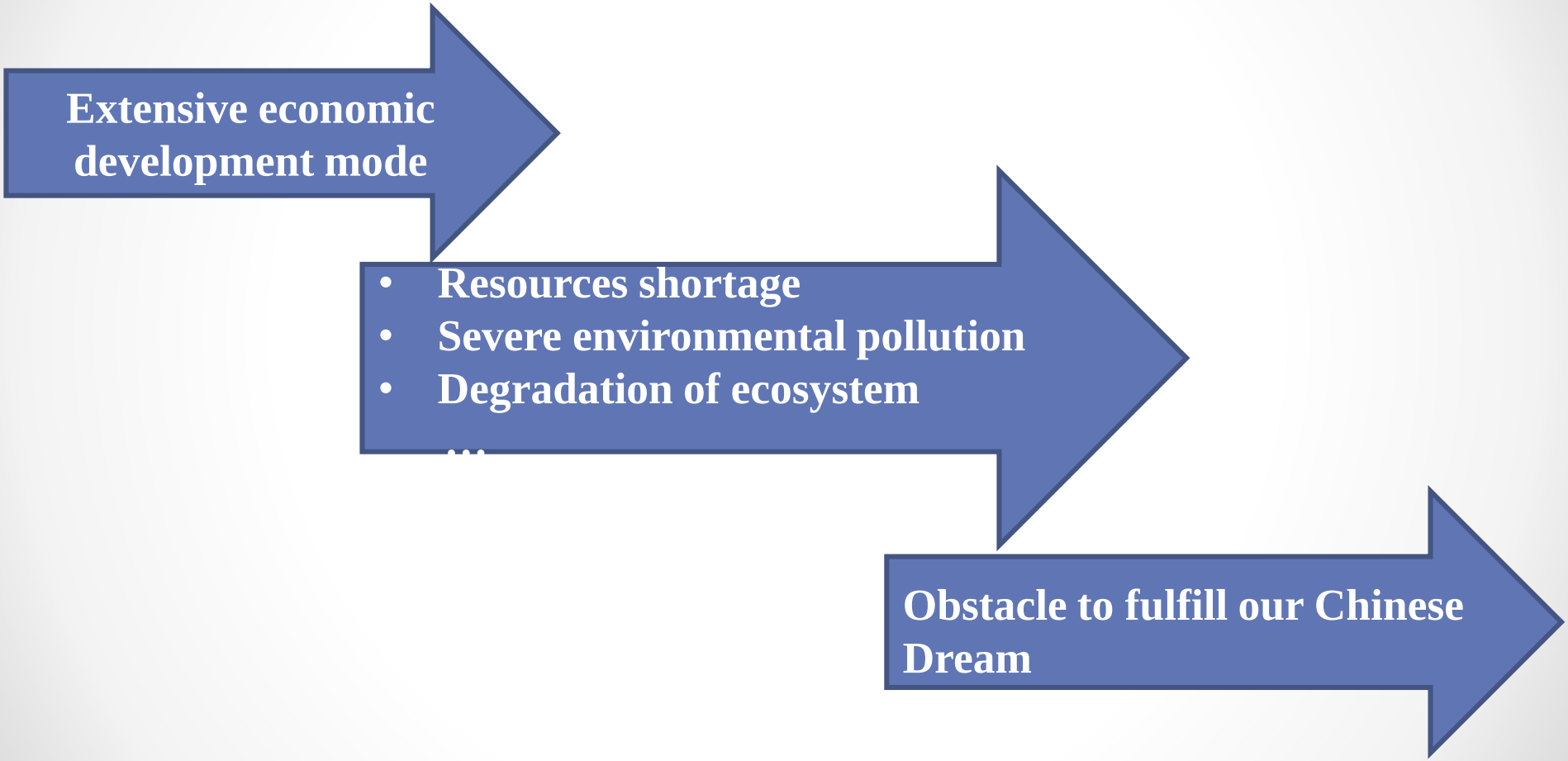
(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;

(c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

External Stress

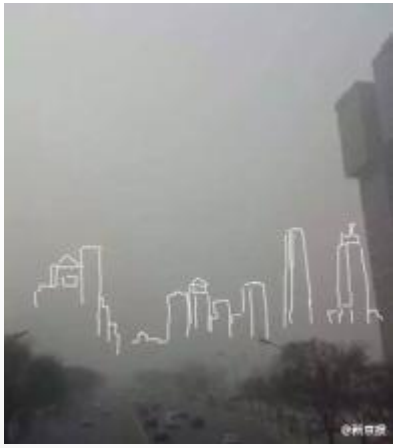


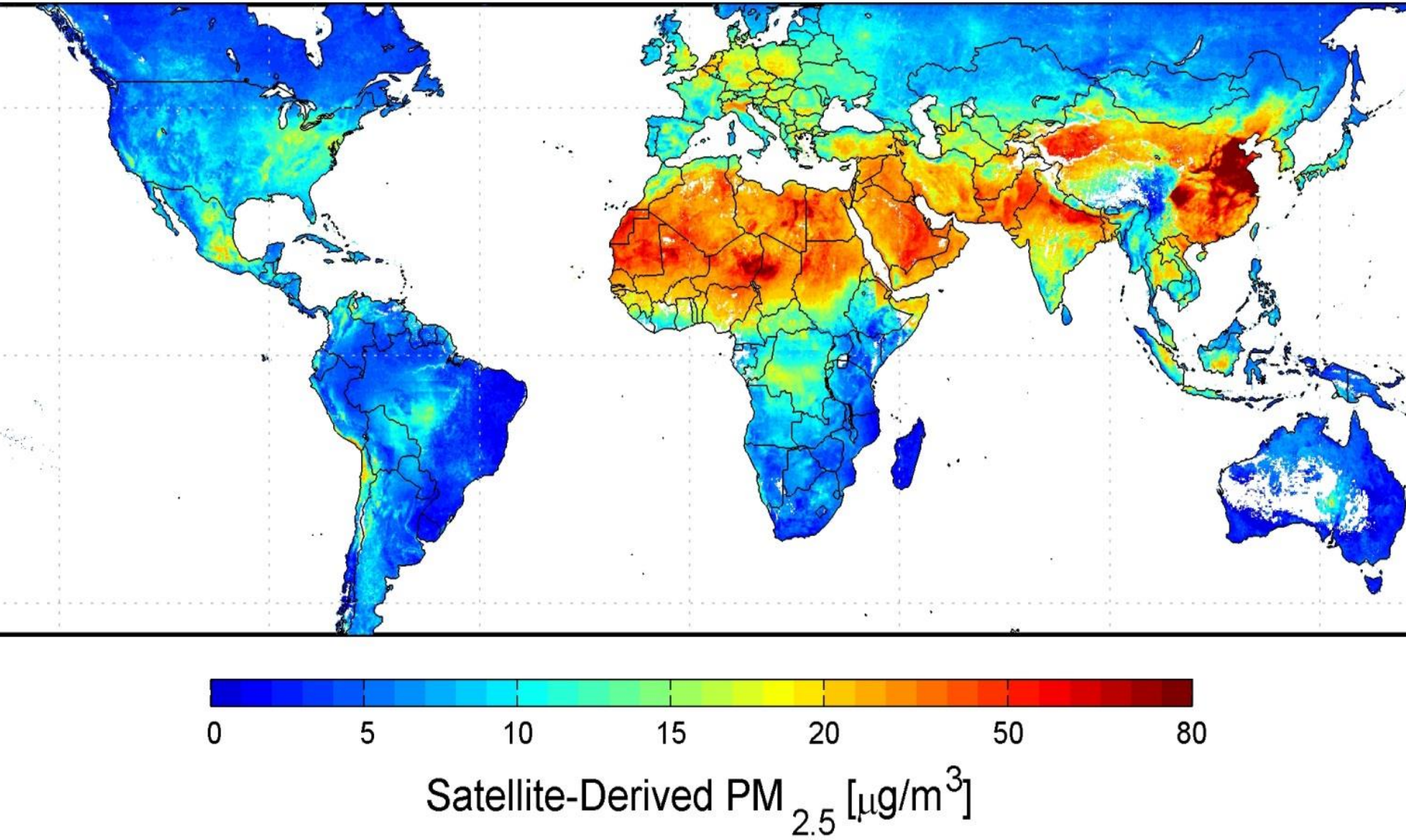
Internal Stress



Internal Stress

Explosion of Smog phenomenon around the country





Global satellite-derived map of $PM_{2.5}$ averaged over 2001-2006
Credit: Dalhousie University, Aaron van Donkelaar

Case study I

- Beijing, Shanghai, Guangzhou, Chengdu, Shenyang

✓ respectively in five important economic zones

✓ Takes up over 50% GDP

✓ Huge energy consumption

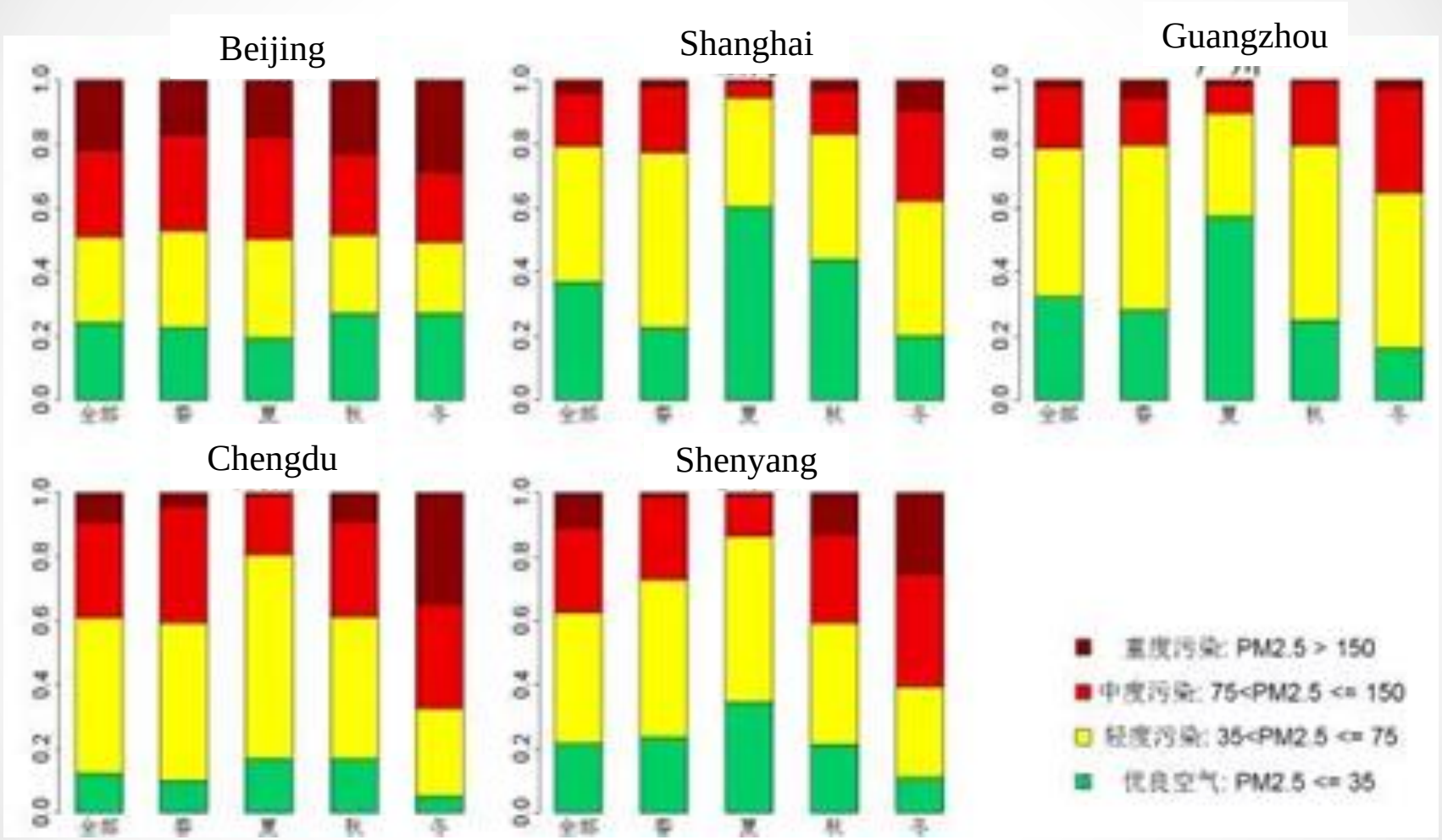
✓ Severely affected by air pollution and smog

✓ Provide pragmatic evidence to pollution prevention and treatment

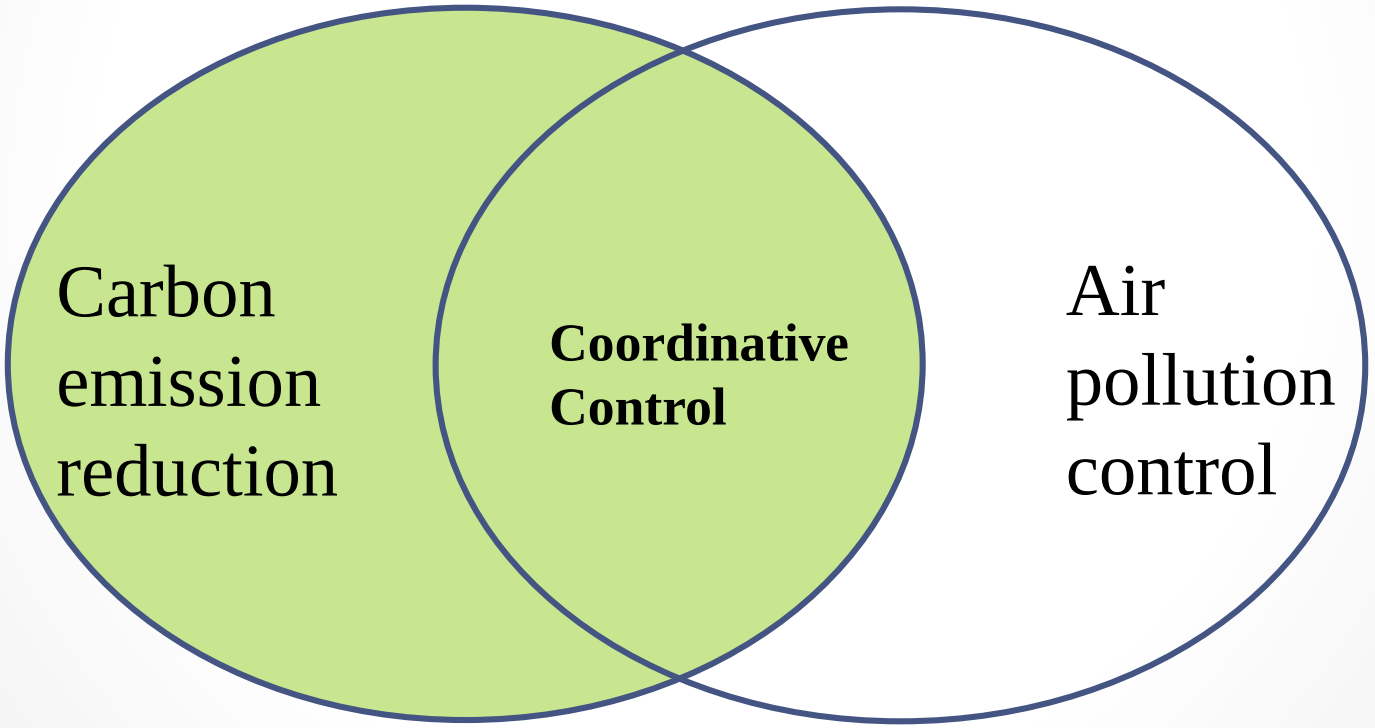
“Championship” for the worst pollution—Chengdu and Beijing

Index Rank	Ratio of pollution status	Ratio of Severe Pollution	Ratio of good air quality	Average hours of consecutive pollution
1 Worst	Chengdu(0.88)	Beijing(0.22)	Chengdu(0.12)	Chengdu(92.4)
2	Shenyang(0.78)	Shenyang(0.11)	Shenyang(0.22)	Beijing(67.9)
3	Beijing(0.75)	Chengdu(0.09)	Beijing(0.24)	Guangzhou(62.5)
4	Guangzhou(0.68)	Shanghai(0.04)	Guangzhou(0.32)	Shenyang(52.4)
5 Best	Shanghai(0.63)	Guangzhou(0.02)	Shanghai(0.37)	Shanghai(52.3)

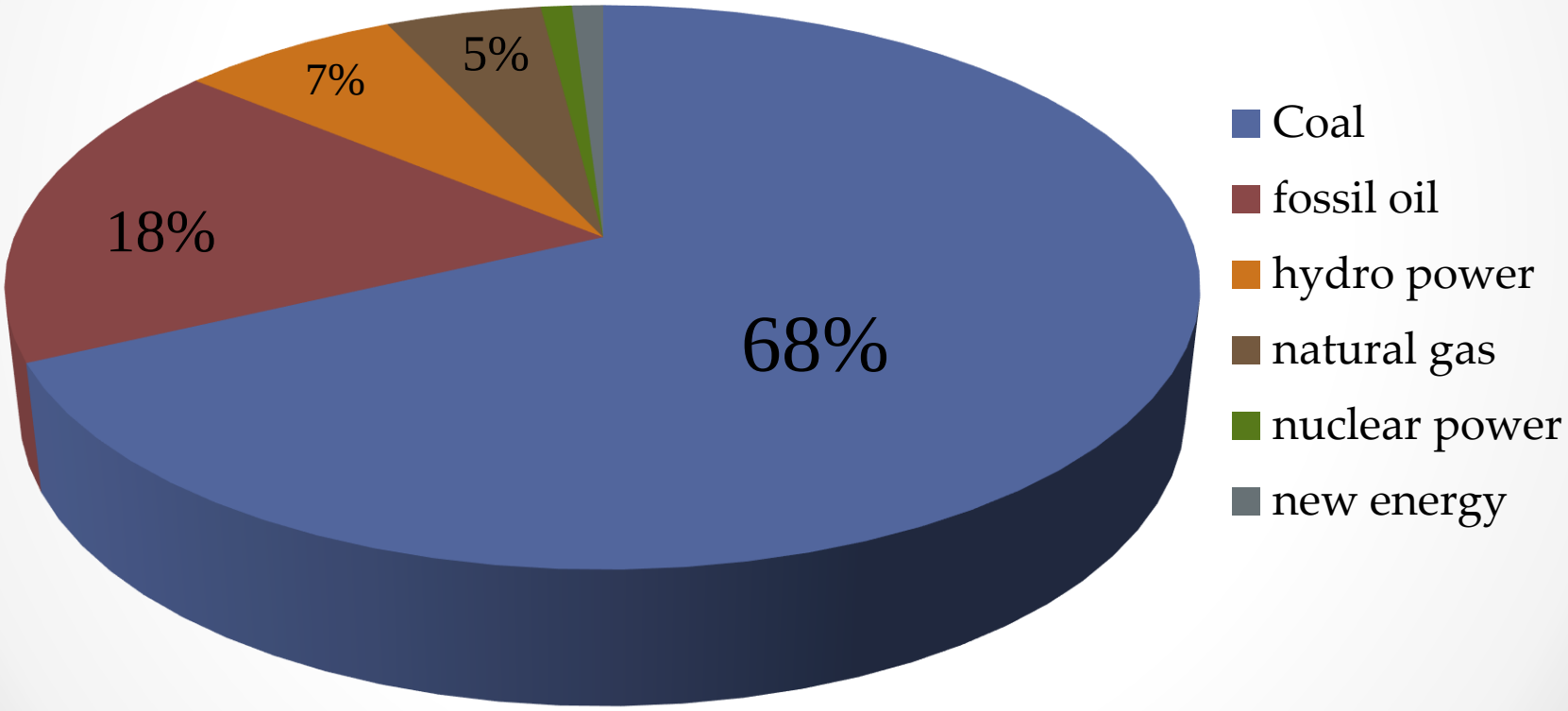
Air pollution Status in four seasons



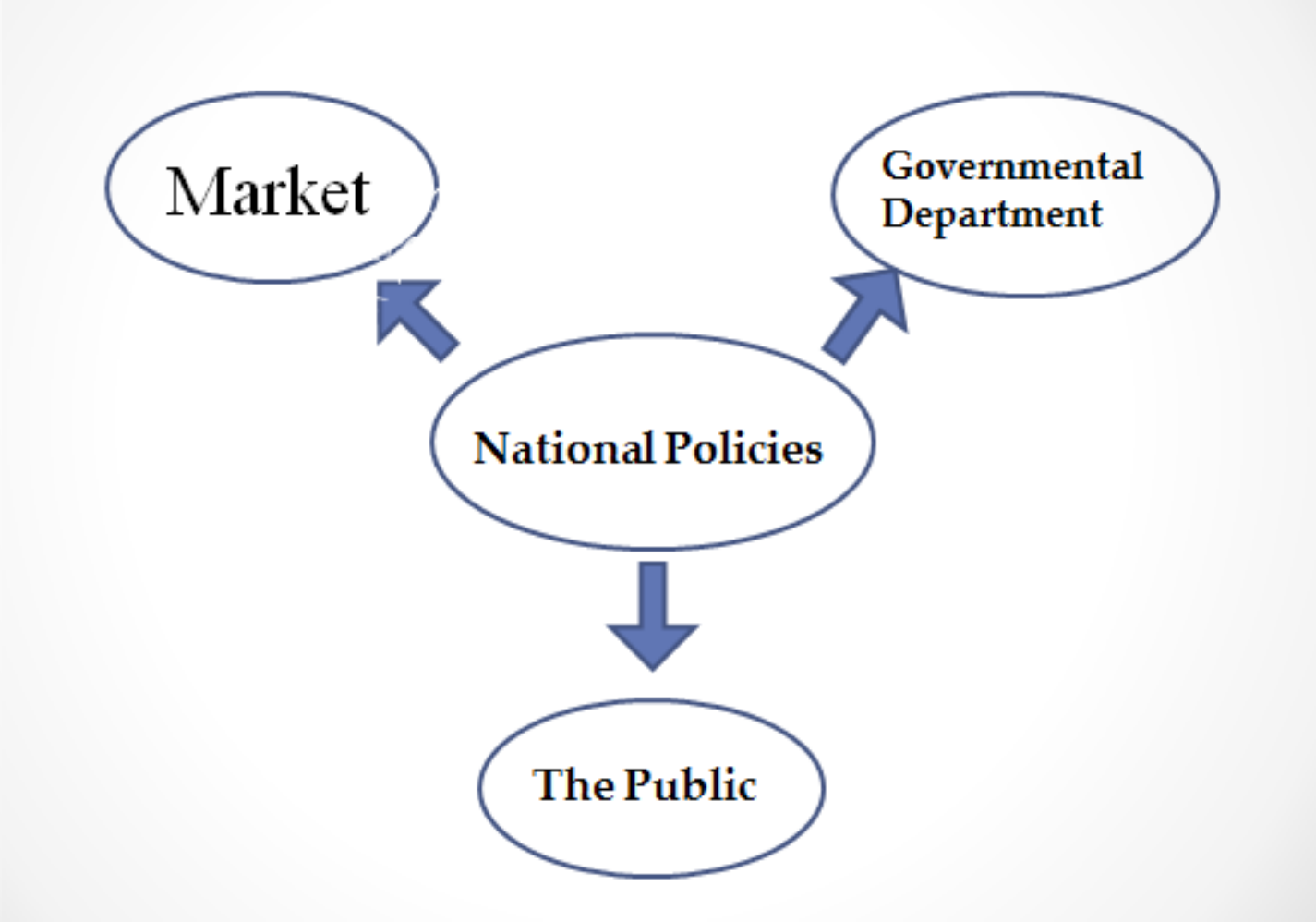
II. Relations between climate policy and policies of air pollution control



Energy Structure of China



How to achieve the goal



Laws and Regulations

Action Plan of Air Pollution Prevention and Treatment—issued by State Council, Jun.,2013

Law of Air Pollution Prevention and Treatment of P.R.China—issued by the Standing Committee of the National People's Congress, Jan. 1st, 2016

Notice for Strengthening Low-carbon Economy in National Eco-Industrial Park– issued by General Office of MEP, Dec., 2009

Regulations of Planning Environmental Impact Assessment—issued by State Council, Aug. 2009

Work Plan for Greenhouse Gas Emission Control in the Thirteenth Five-Year Plan—issued by State Council, Oct., 2016

…

Case Study II

- Action Plan of Air Pollution Prevention and Control, issued by State Council on Sep. 10th, 2013

1) Increase Effort of **Comprehensive Control and Reduce Emission** of Multi-Pollutants

2) Optimize the **Industrial Structure**, Promote **Industrial Restructure**

3) Accelerate the **Technology** Transformation, Improve the **Innovation** Capability

4) Adjust the **Energy Structure** and Increase the **Clean Energy Supply**

5) Strengthen Environmental Thresholds and Optimize Industrial Layout

6) Better Play the Role of **Market** Mechanism and Improve Environmental Economic Policies

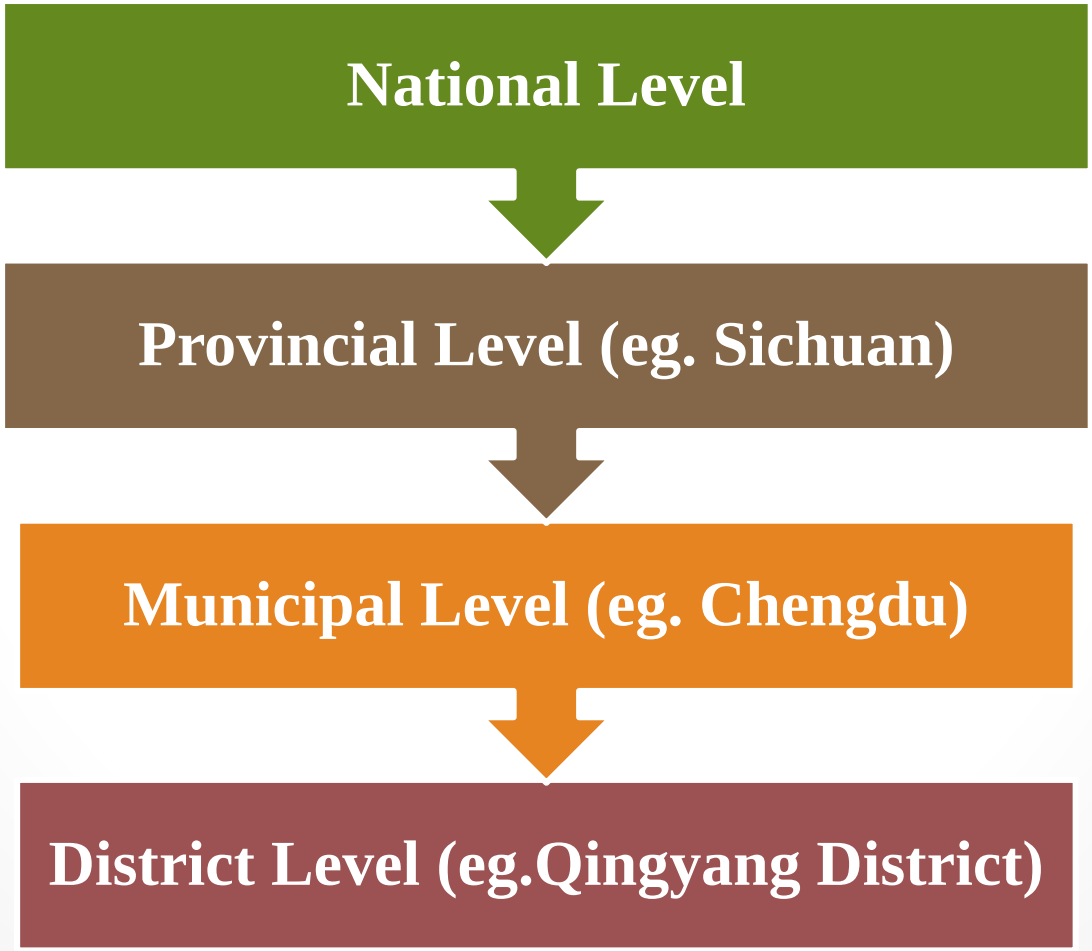
7) Improve Law and Regulation System. Carry on **Supervision and Management** Based on Law

8) Establish the Regional Coordination Mechanism and the Integrated Regional Environmental Management

9) Establish Monitoring and Warning System. Cope with Heavy Pollution Weather

10) Clarify the Responsibilities of the **Government, Enterprise and Society**. Mobilize Public to Participate in Environmental Protection

How does the local government do with the national action plan?—Take Sichuan as an example



Provincial Level

- Implementation Details of the Action Plan for Air Pollution Prevention and Control in Sichuan (2014, 2015, 2016…)

✓ Requires the municipal/county government to compile its corresponding implementation details (phase out outdated capacity, general control of coal consumption, upgrade or move out the heavily-polluted industry, desulfurization, denitrification and dust-move, etc.)

✓ Renovate coal-fired boiler

✓ Achieve general emission reduction of major air pollutants

✓ Strengthen the prevention and control of industrial air pollution

✓ Strengthen urban environmental comprehensive management

✓ Speed up to phase out the "yellow label vehicles"

✓ Adjust and optimize industrial structure

✓ Promote comprehensive utilization of sugar canes and Supervise the prohibition of burning the sugar canes

✓ Promote cleaner production in major industries

✓ Strengthen clean use of energy resources

✓ Promote environmental infrastructure construction

Municipal Level

- Chengdu Municipal Action Plan of Air Pollution and Control (2014-2017) issued by Chengdu Municipal Government

✓ Set up goals and detail the measures

✓ Measures cover wide areas including industrial pollution prevention and control, emission and pollution prevention and control of motor vehicles, strengthening non-point pollution treatment, strengthening energy structure adjustment, phasing-out outdated capacity and promoting industrial upgrading… (32 detailed measures)

✓ In each aspect has listed specific projects to achieve corresponding goal and has listed the responsible units which shall enforce corresponding actions.

✓ Compared with the provincial action plan, it would be more specific and detailed.

District Level

- Qingyang District Action Plan for Air Pollution and Control (2014-2017) issued by Qingyang District Government

✓ According to the contents of municipal action plan, the district government draws up its own district plan to achieve the municipal goal.

✓ It specifies the guiding unit, responsible unit and participating unit in each detailed measure.

Case Study III

- Promote Low-carbon economy in National Eco-Industrial Park

✓ Issued by General Office of MEP

✓ Urge the national eco-industrial park to incorporate the theory of circular economy, low-carbon economy and eco-industry, take low energy consumption, low emission, less pollution as foundation, to improve energy use efficiency and energy structure through industrial optimization, technology innovation and upgrading management etc.

Case Study III

- Emeishan Municipal Eco-Industrial Park Development Plan
- Emeishan city is famous for its Mount Emei, which is the world cultural and natural heritage site.

Industry in Emei

- Development Strategy—Prosper the city by tourism, robust the city by industry
- Importance to develop eco-industry
- Eco-industrial Park with leading industry of silicon and photovoltaic (PV) industry, processing storage and logistics industry as well as chemical and building material industry

✓ Water reuse and pollution control

✓ Solid waste reuse and pollution control

✓ Air pollutants control

✓ Energy gradient use

✓ Besides1) to introduce comprehensive enterprise to link different industries into an integrated industrial chain simultaneously;

✓ 2) To form up virtual industrial chain

Case study IV-the ecological red line

- What is ecological red line?

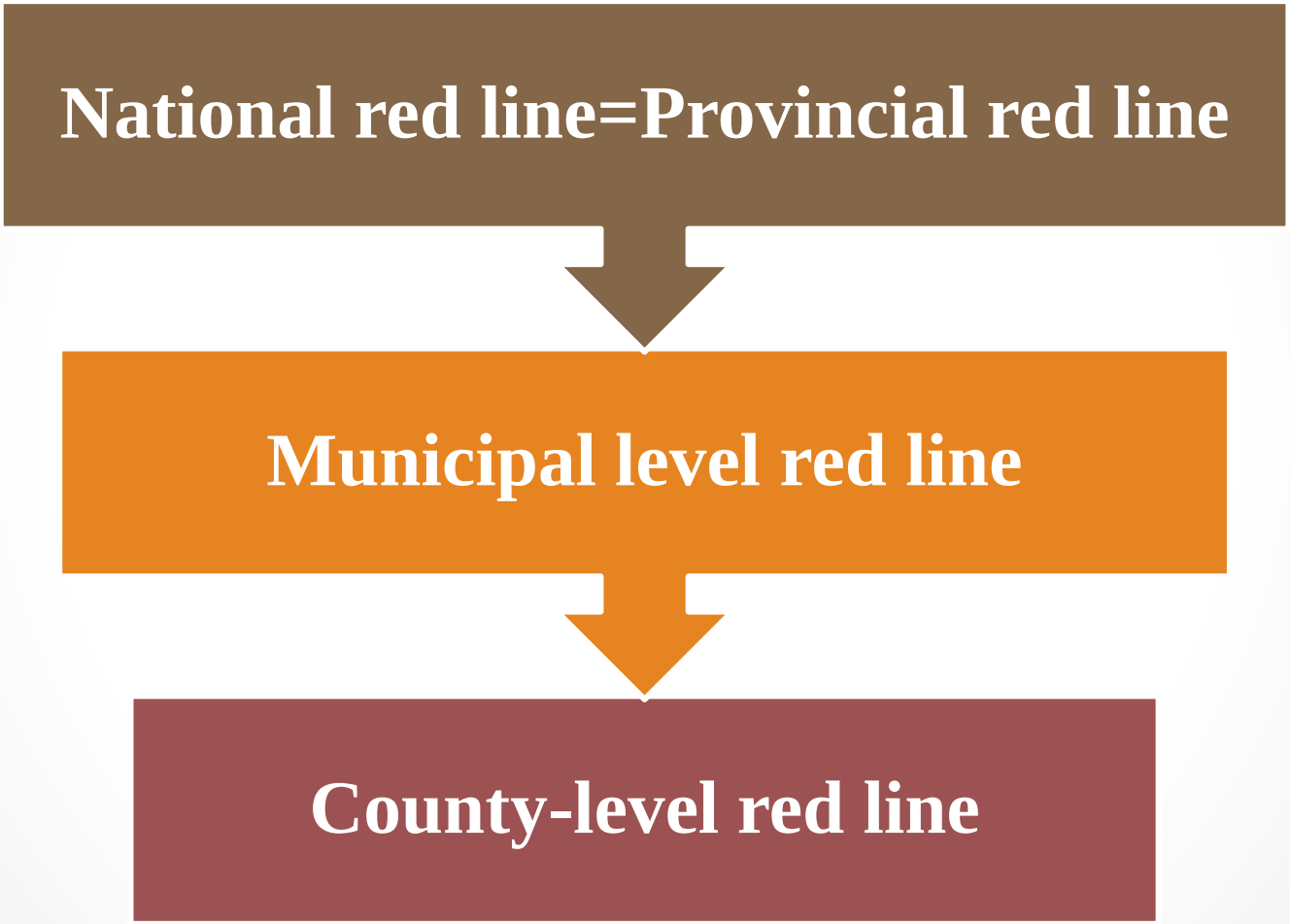
It is the line drawn up based on law, referring to the areas of major eco-function, eco-environmental sensitivity and fragility. It is the bottom-line for national and regional eco-security, playing an important role in maintaining eco-security, guaranteeing eco-service function and supporting economic and social sustainability.

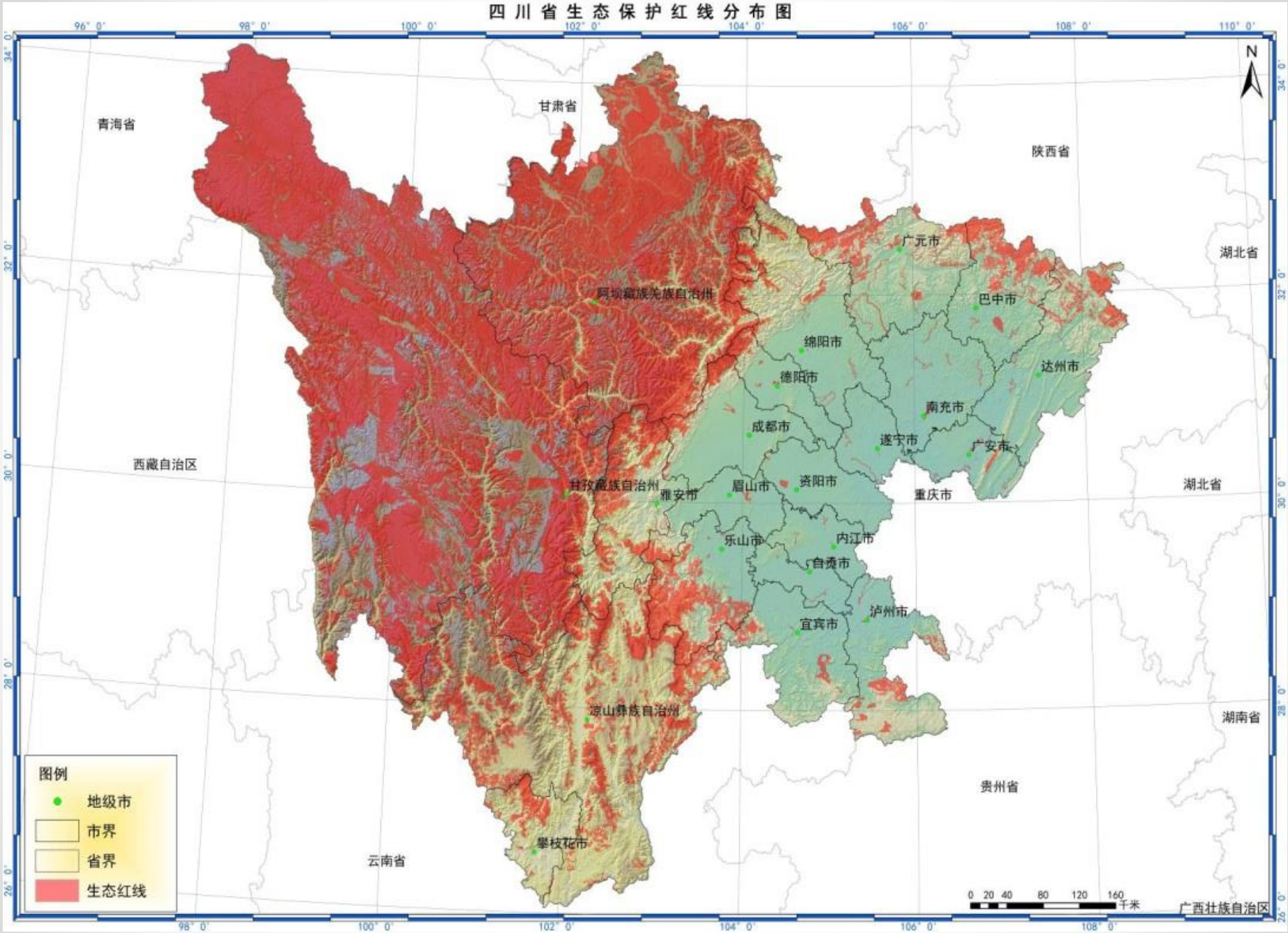
Some major functions

- The red line helps to clarify the maximum consumption of resources, to strengthen the coordination of the control of total consumption of resources and management of consumption intensity.

- It contributes to carbon sink (forestry ecosystem, wetland ecosystem, grassland ecosystem, marine ecosystem …).

Ecological Red-line in Sichuan




四川省生态保护红线分布图
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青海省
甘肃省
陕西省
湖北省
西藏自治区
湖南省
贵州省
云南省
重庆市
广西壮族自治区
广元市
巴中市
阿坝藏族羌族自治州
绵阳市
达州市
德阳市
南充市
成都市
遂宁市
广安市
甘孜藏族自治州
雅安市
眉山市
资阳市
乐山市
内江市
自贡市
泸州市
宜宾市
凉山彝族自治州
攀枝花市
图例
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市界
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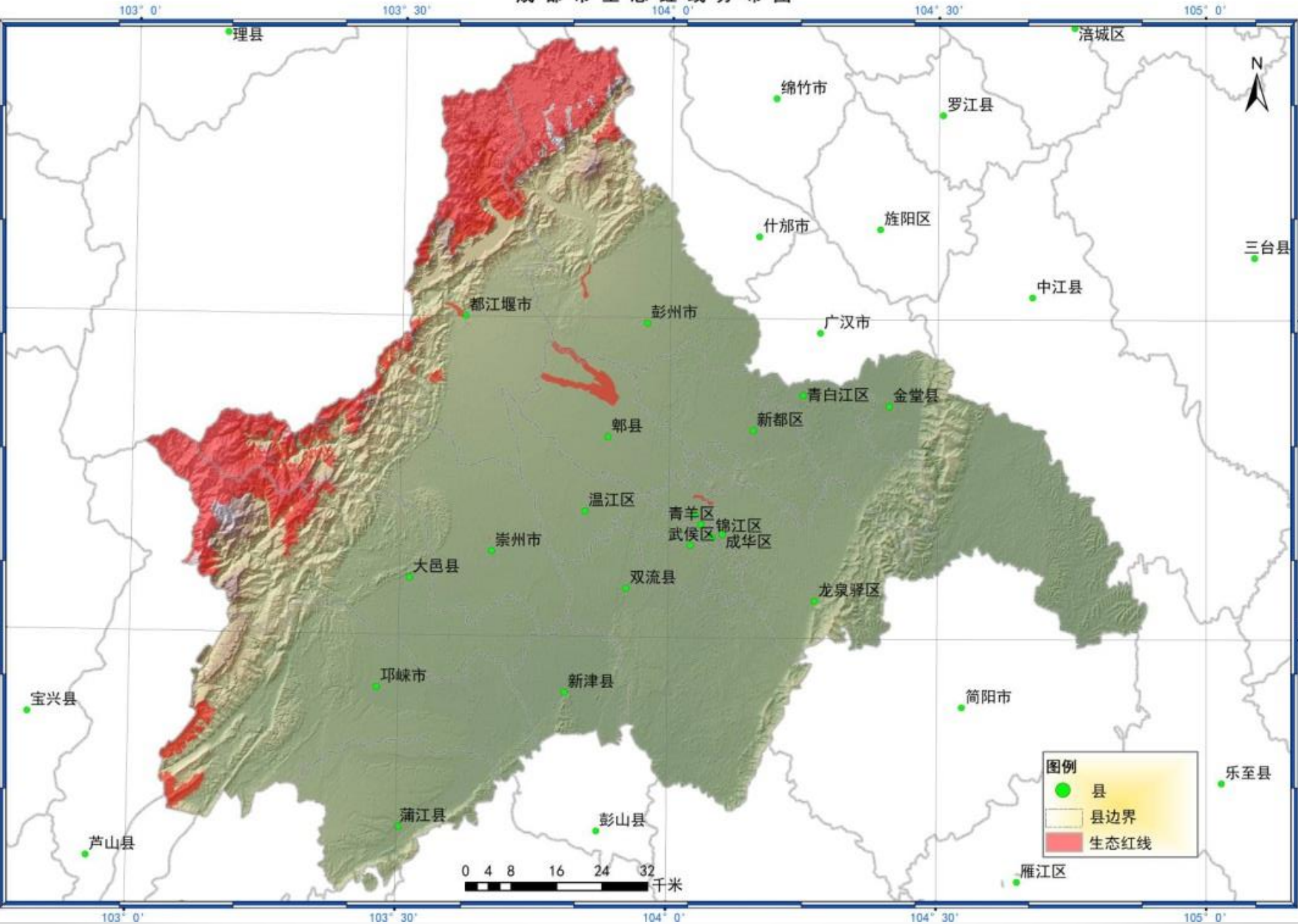
成都市生态红线分布图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彭州市
广汉市
青白江区
金堂县
新都区
郫县
温江区
青羊区
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成华区
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大邑县
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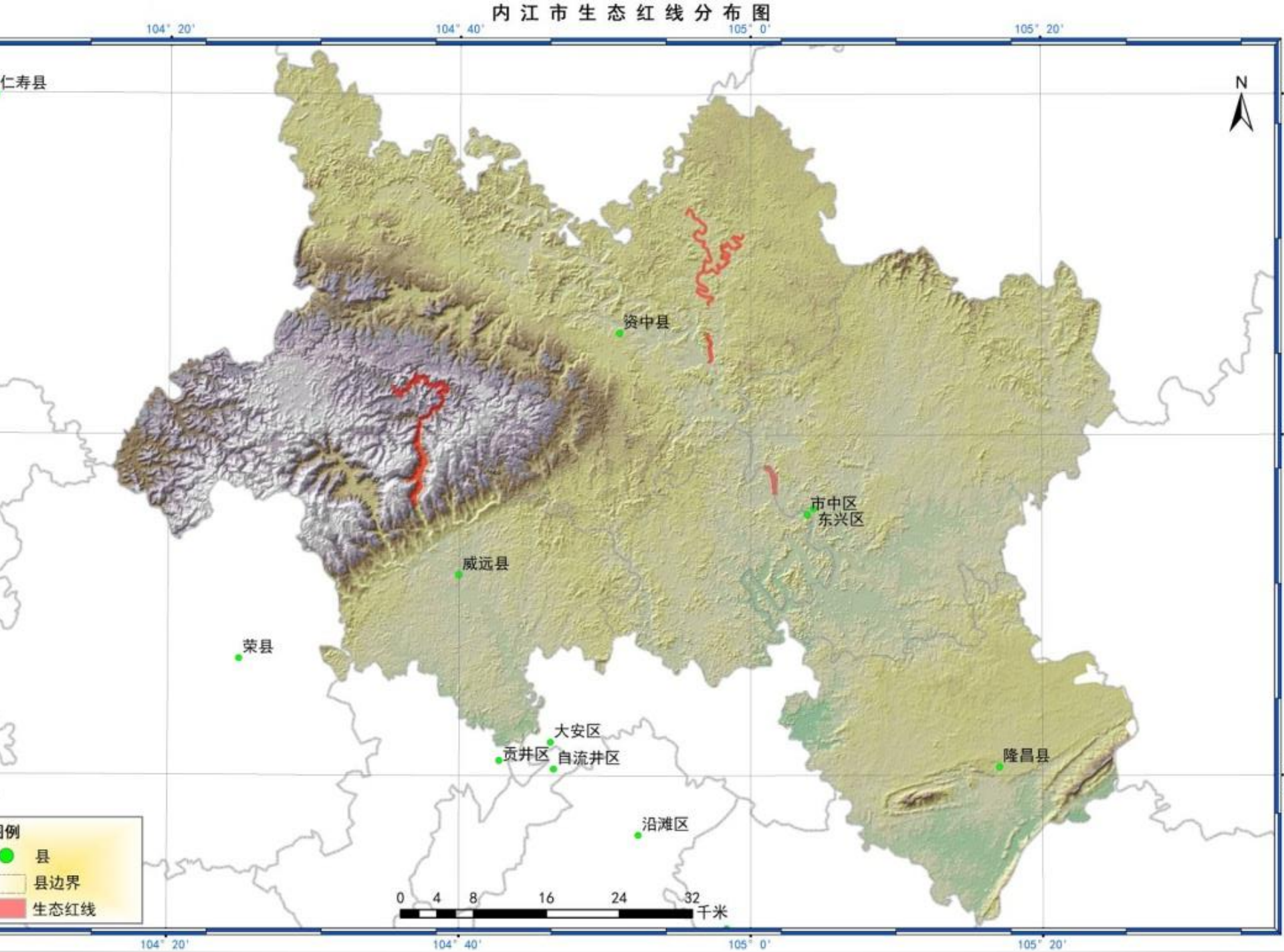
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荣县
大安区
贡井区
自流井区
隆昌县
沿滩区
图例
县
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生态红线
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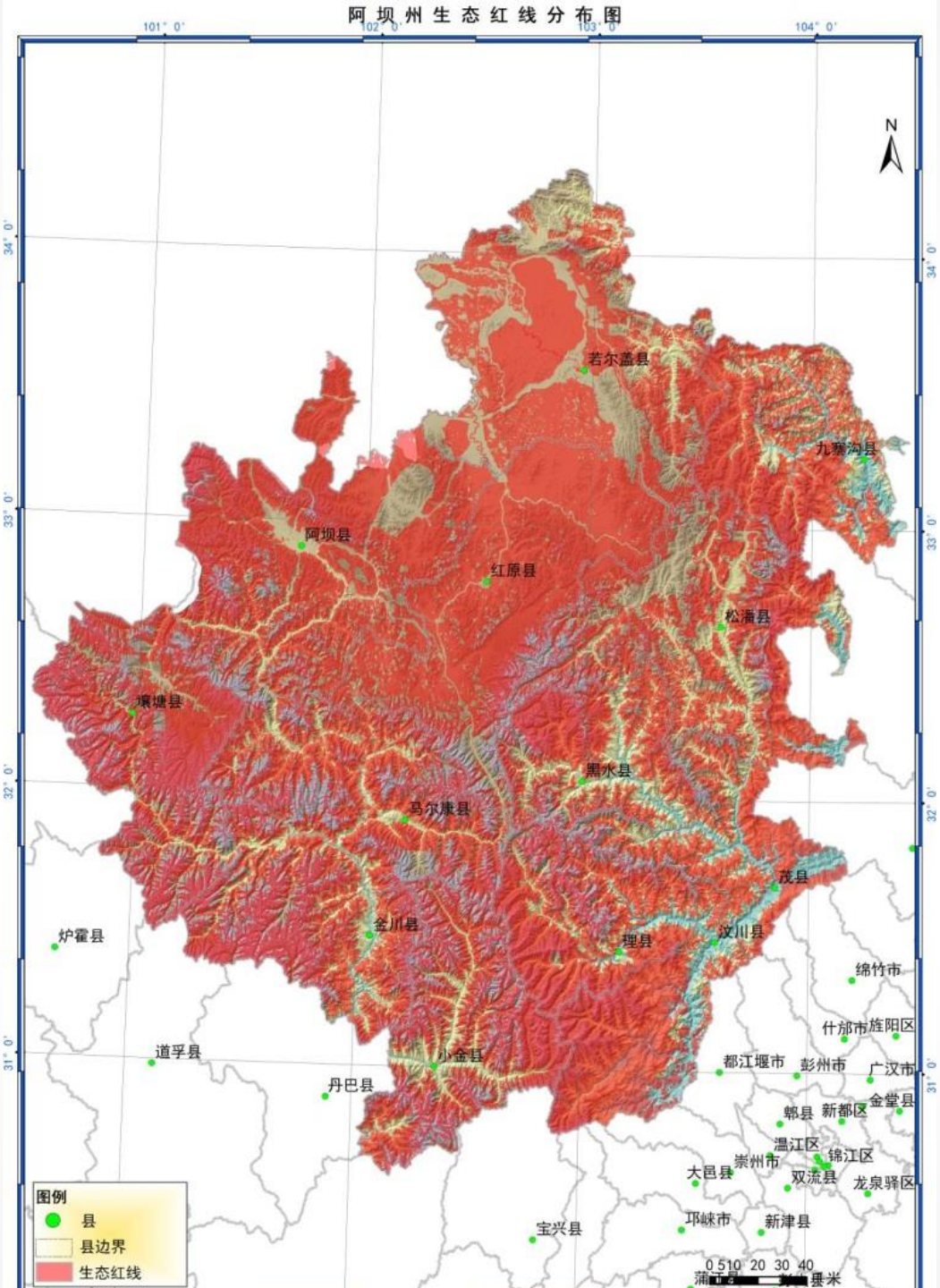
阿坝州生态红线分布图
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九寨沟县
阿坝县
红原县
松潘县
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黑水县
马尔康县
茂县
炉霍县
金川县
理县
汶川县
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小金县
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彭州市
广汉市
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金堂县
郫县
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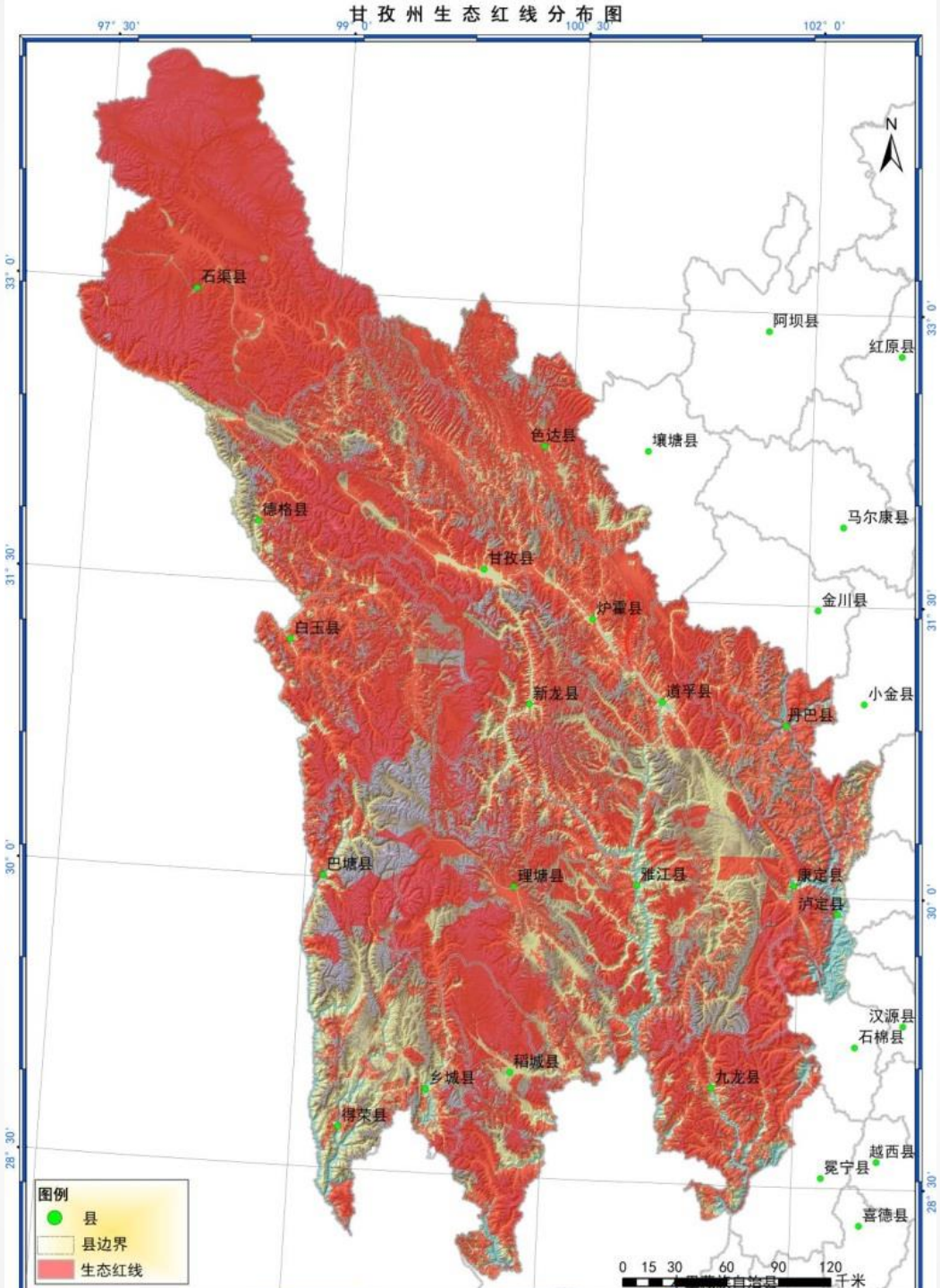
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图例
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生态红线
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Grassland Ecosystem

Forestry Ecosystem

Wetland Ecosystem

And the Poor?

- Thanks !