

# Reflections on China's Socialist Ecological Civilization Construction

## —— Perspectives of Social-Ecological Transformation

### ***Abstract:***

The emphasis of Socialist Ecological Civilization in the 18th congress of CPC and the proposal of "Green Development" in the "Thirteen Five Year" Plan both indicate that Ecological Civilization Construction has been raised to an unprecedented height in China. Based on the theory of Social-Ecological Transformation, this article elaborates if or to what extent China's Ecological Civilization Construction goes beyond the logic of capitalist imperative, if environmental benefits still succumbs to the current political and economic structures. It concludes that as the newest sustainable discourse, Ecological Civilization has great influence on the formation and enforcement of environmental policy in China. As a comprehensive and systematic experiment concerning the change of mode of living and production, divergent interpretations of Ecological Civilization Construction still exist among officials in multi-level governance, which leads to different preferences when implementing Ecological Civilization goals. The orientation of growth in multilevel governments should be weakened and pioneer of change with emancipatory horizon or ecological forms of production and living should be encouraged.

### **Key words:**

Social-ecological transformation, green capitalism, ecological civilization, ecological civilization pilot

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## Introduction

On 12 December 2015, more than 195 countries reached a historic global climate agreement in Paris UN Climate Change Conference, marking a turning point in international climate politics. China signed the Paris Agreement on climate change on 22 April 2016, giving a strong push to the international efforts against global warming (Xinhua News, April 22) . Meantime, China's intended national determined contribution and commitment to the Paris climate pact will bring great challenges to China. China has promised to peak its carbon emissions by 2030, cut its carbon emissions per unit of GDP by 60-65 percent compared to 2005's level by 2030 and increase non-fossil fuel sources in primary energy consumption to about 20 percent. To fulfill its commitment and pledges, China has a long journey to go, considering the fact that China is still in the process of industrialization and urbanization and tops the list as the world's largest carbon emitter. Especially, after the world economic crisis in 2008 and 2009, China's economy shifts to a new economic stage with faltering growth, which is called China's Economic New Normal. It is worth noting how those ambitious climate goals will be implemented in China while at the same time keeping a steady economic growth, or decoupling growth from environmental pollution.

Climate targets are also incorporated into China's 13th Five-Year Plan<sup>①</sup>, which is a typical green development strategic plan. As for the first time, "Green Development" becomes one of the five major principles underpinning China's long term growth, indicating China's courage to respond ecological challenge and commitment to pursue Ecological Civilization Construction , a strategy which was raised in the recent CPC congress. As the newest sustainability discourse in China, how is Ecological Civilization Construction promoted and put into practice, to which extent Ecological Civilization Construction could achieve green and coordinated development goals, as well as China's international climate change goals. This is the major question that this paper tries to explore. Specifically, based on the theory of Social-Ecological Transformation, this article elaborates if or to what extent China's Ecological Civilization Construction goes beyond the logic of capitalist imperative, if environmental benefits still succumbs to the current political and economic structures, What China's Ecological Civilization Construction could offer to the world. This

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<sup>①</sup>China's Five Year Plans are the government's major development blueprints for long term social and economic policies. The time period for 13<sup>th</sup> Five-Year Plan is from 2016-2020.

study aims to shed light on a better understanding of China's environmental politics, to provide a periodic review of the ongoing Ecological Civilization Construction and further insight into manifold achievements and challenges with regard to environmental response.

The paper is structured as follows: The first section analyzes the theory of Social-Ecological Transition, the second section outlines how the major political discourses on environment governance evolve in China in the past few years, the third section highlights how the practice of Ecological Civilization Construction in China has proceeded, critical thinking concerning Ecological Civilization Construction will be explicated in the last section.

### **Theory of Social-Ecological Transformation**

The theory of Social-Ecological Transformation is a visionary and strategic perspective aiming to overcome multiple crisis and predominant mode of production and living, which is issued by many leftist think tanks like Rosa Luxemburg Foundation, critical scholars and other political organizations. In the context of economic , financial and ecological crisis, many concepts like *Green Economy/Green Growth* have been put forward to guarantee a sustainable growth. For example, the United Nations Environment Programme (UNEP) stated in 2001, “The recent traction for a green economy concept has no doubt been aided by widespread disillusionment with our prevailing economic paradigm, a sense of fatigue emanating from the many concurrent crises and market failures experienced during the very first decade of the new millennium, including especially the financial and economic crisis of 2008. But at the same time, we have seen increasing evidence of a way forward, a new economic paradigm- on in which material wealth is not delivered perforce at the expense of growing environmental risks, ecological scarcities and social disparities”(UNEP 2011). *Green Economy* promoted by UNEP, *Great Green Technological Transformation* raised by UNDP , or *Sustainable Growth* initiated by the European Commission are pretty the same strategy, given the fact that they all depend on markets to deal with ecological challenge and have faith in a win-win solution between economic growth and environment, thereby “business as usual” is still the predominating motto.

By contrast to *Green Economy* approaches, Social-Ecological Transformation goes further by questioning capitalist dynamics, power and domination, namely the dominant mode of production and living as well as the societal nature relations in capitalist society. Four theoretical concepts — capitalist mode of production, regulation and hegemony, a critical understanding of the state and governance theory as well as societal nature relations, contribute a comprehensive understanding of the theory of Social-Ecological Transformation (Brand, 2015b). It is argued that capital has the tendency of turning social relations and nature into commodities and commodification of “colonization of nature” (Haberl et al, 2011) could be identified in the capitalist mode of production. According to political ecology, nature is not “out there”, but rather societally appropriated through the satisfaction of basic societal needs like food and housing (Görg, 2011). Societal nature relations with environmentally unsustainable character were stabilized during Fordism and Fordist forms of mass production and consumption (imperial modes of production and living) became attractive in Global South as well as Global North (Brand, 2015b). From the perspective of regulation and hegemony, state is not neutral, but rather a specific materialized social institution which mainly secures and existing social relations including societal nature relation (Poulantzas, 2002). In other words, through a power-shaped knowledge structure, intentional political steering and other forms of social dominance, unsustainable development is deep-rooted in state institutions and power relations. Besides, capitalism has some mechanisms to adjust their way of appropriation of nature, making ecological contradictions or negative consequences manageable or temporarily postponed into the future or spatially externalized (Brand, 2015c).

Accordingly, Social-Ecological Transformation theory focuses more on the analysis of dominant development dynamics under capitalist accumulation imperatives or the manifold forms of societal domination. It sees the capitalist dynamics, especially the power-structured social relations are cause of social-ecological crisis. From the perspective of green-left, how to integrate environmentalism into social just issue, how to overcome capitalist imperatives are of crucial importance. It is acknowledged that a new sustainable, democratic and just world must root in current forms of societal production and domination, but transcend them in the same time (Brand,

2015b). For change takes place continually, alternatives to capitalism should aspire to new mode of production and living, new understanding of well-being beyond productivism and consumerism, emancipatory forms of the social division of labor(Brand,2015a).

### **Evolution of Environmental Discourse in China**

The concept of sustainable development has become one of the worldwide dominant development discourses and global strategic consensus due to the promotion of United Nations, especially Human Environment Conferences held in Stockholm and Rio. The 1972 Stockholm Human Environment Conference is a turning point for China's integration of international environmental governance. The 1992 Rio Human Environment Conference has great impact on China's environmental discourse development, especially the focus on the marriage of environment and development on the forum facilitated China to support its initiatives and accept the idea of sustainable development (Heggelund and Backer, 2007: 421). During 1990s, the environment diffusion became increasingly institutionalized at the international level due to the transnational communication (Busch, Jörgens,2004) . China's sustainable development strategy is the result of UNCED's recommendation for a national strategy of Agenda 21.Following Rio conference, China formulated the “ China Agenda 21” in 1994, proposing an overall strategy and policy of sustainable development in the Chinese context. In 1997, the strategy of sustainable development was written into the 15th National Congress of the Communist Party of China. China has become more active in international environmental protection and global climate governance in the 1990s.

In order to achieve a more comprehensive, coordinated and sustainable development, elites of CPC put forward the Scientific Concept of Development at the Third Plenary Session of the 16th CPC National Congress in 2003 and it was established as the guiding thought for China's economic and social development at the 17th CPC National Congress. As stated in the congress report, Scientific Concept of Development means that development is still the top priority for China, indicating that economic development is the central task and the key for solving upcoming challenges. The fundamental requirements of the “People- Centered” Scientific Concept of Development are comprehensive, coordinated and sustainable

development, including a balanced development between urban and rural areas, between different regions, between economic and social undertakings, between man and nature, between different generations. In this sense, Scientific Concept of Development could be regarded as the continuation of the concept of sustainable development, but a upgraded version, reflecting the further greening of the ideology of CPC (Huan , 2013:10).

Meantime, former Chinese President Hu Jintao declared to construct Ecological Civilization at the 17th CPC National Congress. In 2012, Ecological Civilization Construction was approached to a new political height at the 18th CPC National Congress. For the first time, Ecological Civilization was proposed in a single chapter at the national congress report. Besides, the necessity and importance of Ecological Civilization Construction as well as its unique status and role in promoting China's socialist modernization was also stressed.

*“Promoting ecological progress is a long-term task of vital importance to the people's wellbeing and China's future. Faced with increasing resource constraints, severe environmental pollution and a deteriorating ecosystem, we must raise our ecological awareness of the need to respect, accommodate to and protect nature. We must give high priority to making ecological progress and incorporate it into all aspects and the whole process of advancing economic, political, cultural, and social progress, work hard to build a beautiful country, and achieve lasting and sustainable development of the Chinese nation.”( Xinhua Press, 2012)*

The all-round and profound discussion on the detailed contents of Ecological Civilization Construction, especially the promotion from “ Four in One” to “ Five in One” of socialist modernization layout, implies the innovation of CPC's governing philosophy. The thrust of Ecological Civilization Construction is also the highlights and breakthrough for Socialism with Chinese Characteristics. After the 18th CPC National Congress, the Third and Fourth Plenary Session of the 18th CPC National Congress made further strategic and top-level design for Ecological Civilization, aiming to promote the system construction. In May 2015, the Party Central Committee and the State Council formally published “Opinions On Accelerating Ecological Civilization Construction”, which was the first specialized paper for

Ecological Civilization, making clear requirements and guidance for the general goals and important tasks. In October 2015, “Green Development” became one of the five development principles<sup>②</sup> in the 13<sup>th</sup> Five-Year Plan (2016-2020). To some extent, green development is the new explanation and extension of sustainable development. From the acceptance of sustainable development, to the greener explanation of Scientific Concept of Development as well as the promotion of Ecological Civilization Construction based on green development, all indicate an active attitude and efforts of pursuing ecological modernization in China of Chinese Communist Party.

Ecological Civilization is still a buzz word and under great debate among scholars as for its references. Generally, Ecological Civilization is considered as a new kind of civilization, which goes beyond industrial civilization. For example, Lu Feng regards Ecological Civilization as a civilization guided by ecology, striving for the harmonious relationship between human and nature (Lu, 2013). According to his definition, Ecological Civilization should contains implements (green products) , technology(green technology), institution(democracy, and restricted market) ,custom, arts, ideas(Non-anthropocentrism) and language. Many scholars address Ecological Civilization issue in line with official papers of the central government, focusing on local practice to realize a green development. For instance, the book *Introduction to Ecological Civilization* is structured in accordance with the analysis of Ecological Civilization in 18th CPC National Congress, emphasizing that Ecological Civilization Construction should penetrate into the economic construction, political construction, cultural construction as well as social construction (Jia, 2013). Meantime, some scholars try to underline theoretical implications of Ecological Civilization or philosophy values of Ecological Civilization, instead of analysis of political discourse(Huan Qingzhi, for example). Huan Qingzhi points out that Ecological Civilization can be interpreted in four dimensions. Specifically, weak Ecocentrism ( environmental friendly ) value and ethnic on nature/ecology at philosophy theoretical level , alterative economic and social project differed from current

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<sup>②</sup>The five principles (Innovation, Coordination, Green, Opening-up, Sharing)are the main themes in the 13th Five-Year Plan (2016-2020), which was adopted at the Fifth Session of the 18th Communist Party of China.

dominant capitalist paradigm at political ideological level, one integrated part of socialist civilization that aspires to harmonious nature relationship, green dimension of socialist modernization or greening of social economy in practice (Huan, 2014).

### **Ecological Civilization Construction in Practice**

In practice, “Pilot of Ecological Civilization” along with “First Demonstration Zone” takes place in multi administrative levels. The Ministry of Environmental Protection presented the project of “Pilot of Ecological Civilization” in 2008 and authorized 125 cities and regions as “Pilot of Ecological Civilization” till now. In 2013, “National Pilot of Ecological Civilization Index (Trial)” was promulgated by the Ministry of Environmental Protection, which aims at formulating indicators for evaluation of Pilot of Ecological Civilization construction. “National Pilot of Ecological Civilization Index (Trial)” includes evaluation standards for five systems (ecological economy, ecological environment, ecological living, ecological institution, ecological culture) and evaluation index for ecological civilization cities and counties. In May 2014, The Ministry of Environmental Protection awarded Yangzhou City (Jiangsu Province) and other 37 cities (counties, districts) as “National Ecological Civilization Demonstration Zone”.

After the 18th CPC National Congress, other ministries paid more attention on Ecological Civilization Construction. In 2014, National Development and Reform Commission (NDRC) together with Ministry of Finance, Ministry of Land and Resource, Ministry of Water Resource and other ministries published “On the Issuance of National First Demonstration Zone of Ecological Civilization Construction Plan (Trial)” and launched the project of “First Demonstration Zone of Ecological Civilization” in 57 administrative districts. Among which, Fujian province is the “First Demonstration Zone of Ecological Civilization” at province level in China. What makes “First Demonstration Zone” project distinguished from “Pilot of Ecological Civilization” is that former initiatives involve more province level regions and basin as well as mountainous areas (Key areas of Huaihe River Basin of Jiangsu Province, Three Gorges Reservoir in the northeast of Chongqing, for example). Besides, the Ministry of Water Resource and the Ministry of Agriculture also introduced the pilot project for “National Water Ecological Civilization Construction” and “Beautiful Countryside” respectively.



Many demonstration zones have taken considerable measures to implement ecological approaches, such as establishing the natural resources balance sheet, auditing the officials according to environmental benefits and environmental responsibilities, emission trading system (ETS). Fujian province is committed to eliminating outmoded industrial production capacities throughout different industries and strengthening environmental impact assessment of new projects(China Daily, 2014). Fujian province enjoys the highest forest covering rate (63.1%,2015) in China, which is a natural advantage for its construction of Ecological Civilization. Therefore, soil erosion control as well as the promotion of “Green City”, “Green Country”, “Green Channel”, “Green Barrier” is one of the top priority for the ecological governance in Fujian province(Huan,2013).Jiangxi province is also one of the four provinces<sup>③</sup> that has been designated as “First Demonstration Zone of Ecological Civilization”. Jiangxi province strives for “Six Systems Construction” and “Ten Major Projects” to accelerate Ecological Civilization (Huang,2015). “Six Systems Construction” aims to construct system for land space development, system for environmental-friendly green industry, system for saving and intensive use of resources and energy, system for ecological environmental protection, system for ecological culture, system for ecological civilization. “Ten Major Projects” refers to modern agriculture development program, ten strategic important industrial program, modern service program, tourism program, clean energy project, green and low-carbon production mode program, ecological construction project, environmental protection project, ecological culture promotion project and green life steering project.

Jiangsu province is also a pioneer in promoting the construction of Ecological Civilization, and many of its cities are selected as “Pilot of Ecological Civilization”. In July 2013, Jiangsu province announced a strategic goal to be the first province to become demonstration zone of Ecological Civilization in ten years, with all its cities becoming national ecological city. Jiangsu province has made great effort to carry out “Seven Actions” for Ecological Civilization Construction, namely ecological space protection, green economy transition, improvement of the quality of the environment, ecological life, communication of ecological culture, support for green technology

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<sup>③</sup> “First Demonstration Zone of Ecological Civilization” at province level: Fujian Province, Jiangxi Province, Yunnan Province, Qinghai Province.

and innovation of eco-system. Many innovative approaches have been designed with regard to Ecological Civilization, for example “Bilateral Environmental Compensation System” for upstream and downstream areas, “Dual Control Mechanism” for energy consumption intensity and total energy consumption.

At the same time, many evaluation systems have been set up aiming to monitor and forecast the development of Ecological Civilization Construction. For example, Sustainable Development Index advanced by Chinese Academy of Social Sciences, Green Development Index established by Beijing Normal University, the Evaluation and Examination Systems for Ecological Civilization Construction of Development Research Center of the State Council. One famous and comprehensive quantitative evaluation on Ecological Civilization Construction goes to Ecological Civilization Construction Index (ECCI), which has been proposed in 2010 by the team of Beijing Forest University. Based on authoritative data released by the government, ECCI conducts an independent and impartial quantitative annual evaluation on the Ecological Civilization Construction on China(Yan, 2015). *Annual Report on China’s Provincial Eco-Civilization Index(ECCI 2015)* has been published in December 2015, which is a continuation of the previous version of the ECCI, regarding ecological condition, environmental quality, social development and the degree of coordination as the analysis variables. Under each variable, several indicators are put forward for measurement. Take “ecological condition” for example, forest covering rate, quality of forest, coverage for green land, effective protection of nature reserves and the proportion of wetland area have been taken into account for provincial evaluation index system. It is worth noting that “Environmental Quality” is considered to be most important indicator for China’s Ecological Civilization Construction by ECCI team.

### **Critical thinking of Ecological Civilization Construction**

There is a paradox in China: on the one hand, the pursuit of Ecological Civilization Construction and the awareness of ecological challenge have been raised to an unprecedented level. On the other hand, sufficient ecological progress and social change hasn’t emerged. According to results of ECCI 2015, compared to 2013, China’s whole Ecological Civilization Construction level made on progress in 2014, the case for half of 31 provinces(Yan, 2015). To be more specific, China is now

experiencing the outbreak of environmental pollution, slow recovery of ecological system as well as high quantity of resource consumption and pollution emission. Besides, China's Ecological Civilization Construction has been strongly characterized by geographic distribution, which eastern coastal provinces have great strength of social development and northeast along with southwest provinces enjoys ecological security barrier and environmental capacity inventory (Yan, 2015). This is not to deny the efforts and what have already been achieved of China's Ecological Civilization Construction and environmental improvement, including system innovations for auditing local offices and safeguard of environmental interests, administrative regulations and laws for combating air and river pollution, also market systems for emission trading and pollution trading. Considering the fact that environmental limit has become the most important bottleneck for China's economic and social development, a critical analysis of the achievements and challenges of Ecological Civilization Construction would be constructive for further promoting the strategic approach. In this sense, it increases insights into the complicated circumstances and heterogeneous governance capacity and willingness of local governments with reference to Ecological Civilization Construction.

Manifold challenges could be observed regarding Ecological Civilization Construction. First, at theoretical level, scholars as well as officials still do not come to consensus on "What is Ecological Civilization, how to construct Ecological Civilization, What is the criteria for completing Ecological Civilization Construction". Therefore, divergent interpretations on the implications of Ecological Civilization may exist among different provinces and cities, which leads to different preferences as to Ecological Civilization goals. A relatively common phenomenon is the narrow understanding of Ecological Civilization, which means many local officials regard Ecological Civilization merely as environmental protection or pollution control. Lack of richer system innovation and imagination of Ecological Civilization could be observed both in "Fujian Mode" or "Jiangsu Mode"(Huan, 2016).

Second, different understanding regarding Ecological Civilization would definitely causes difficulty for evaluation of the effectiveness and level of Ecological Civilization. People's opinion vary as what standards are assumed to be the completion of Ecological Civilization Construction. Currently, all the evaluation

systems are flawed and could not be recognized by the majority. For example, the objective of ECCI is till the provincial level performance. The lack of sufficient data makes it difficult to monitor lower administrative level construction. A dual challenge for ECCI assessment is the lack of legal binding of the evaluation result and the gap between achievements and anticipation of the public. For the former, the dynamics of ECCI results and the performance of provinces is complicated. Those provinces who have lower ranking of ECCI just ignore the ECCI scores, as a result, ECCI result could not provide as an incentive for further pushing of Ecological Civilization Construction. For the latter, the concept, strategy as well as the administrative regulations and laws for Ecological Civilization Construction are much more than the achievements that the public could feel. For example, the public is skeptical about the result of ECCI, especially Beijing ranks the 2nd of 31 provinces( a score of 95.28), considering the severe fog and haze in Winter(Yan, 2015).

Third, most local officials would face the pressure of economic growth when implementing “ecological province”, “ecological city” , “ecological county” strategies. It is skeptical whether or to what extent green development has become a dominant ideology of governance. As some researches have show, the driving force for provinces or cities to become national “Pilot of Ecological Civilization” or “ Demonstration Zone of Ecological Civilization” is the honor itself, second comes to the money supported by central government (DRC, 2014). Consequently, implication of Ecological Civilization is of little concern. Deep reason for this phenomenon lies in the fact that the assessment mechanism of officials mainly depends on GDP, employment, local revenue and environmental indicator contributes little for the assessment (Ren, 2013). In other words, environmental issues are often considered as the added value or additional pursuit in addition to economic growth. How to tackle the contradiction and conflict between economic growth and environmental protection, how to balance the goals of ecological progress, economic modernization and political stability , how to make a clear road map for the construction of Ecological Civilization, are all challenging issues for multi level governments. The pilot of Emission Trading System in China may provide evidence in this respect regarding the difficulties that local government may counter. Tianjin is one of the seven cities that was chosen for the pilot of ETS in China in 2008. Emission Trading System was

officially open in December 2013, with the compliance rate of 96.5%. Actually, ETS in Tianjin heavily rely on administrative power rather than market mechanism.

Forth, the original purpose for the design of demonstration zone of Ecological Civilization would be divergent models available that could be copied and promoted for more districts. In reality, it is difficult to generate certain kind of model that could be applied to other cities or district. Judging from the list of “Pilot of Ecological Civilization”, those provinces or cities who are selected as the pilot all have obvious natural advantage over other district. For example, the capital of Guizhou province—Guiyang city, is the first national forest city, while Linyi city of Shandong province is also the “Typical Ecological Living-Friendly Ten Best City”. Thus, for the most of cities with less natural resources and urgent demand for economic growth, how to learn the experiences of demonstration zones is not as easy as it seems. On the other hand, high heterogeneous economic and social development, and geographic characteristics make it hard to evaluate which model would be better or superior.

Last but not least, most important challenge lies in the fact that the practice of Ecological Civilization Construction mainly depends on market mechanism to green the economy, by introducing green technologies and environmental economic constellations. It is obvious that Ecological Civilization in China has a tendency to become a replica of Ecological Civilization or certain kind of Green Reformist. As Green Economy strategy increasing gains prominence in China, and it is regarded as a new engine of growth, job and elimination of power. Little is concerned to get rid of capital imperatives of completion and competitiveness. The emphasis on economic and administrative methods in dealing with ecological crisis would easily neglect the necessity and importance of alternative approaches for Ecological Civilization, leading to a misunderstanding of visionary goals of Ecological Civilization. From the perspective of Social-Ecological perspective, an ecological civilization should transform the core of the existing socio-economic, political and cultural model (Brand, 2015e). To be specific, an important precondition of an alternative path or socialist ecological civilization would be a new social and ecological system that could against or restrict the capital and its logic.

## **Conclusion**

Ecological Civilization Construction could not just be interpreted as merely environmental protection or “end of the pipe”, but a transformation of development ideology and development mode, a comprehensive and systematic experiment concerning the change of mode of living and production, adjustment of industrial structure etc. The essence of Ecological Civilization Construction would be an exploration of the alternative political, cultural and social approaches to overcome imperative of capital power, a sample to provide a different relationship between human of nature , as well as nature and society. The theory of Social-Ecological Transition contributes to a better understanding of the potentials and barriers of Ecological Civilization Construction. Therefore, the orientation of growth in multilevel government must be weaken and pioneer of change with emancipatory horizon or ecological forms of production and living should be encouraged. Besides, the essence of socialist ecological civilization or social-ecological transformation is that it does not take place at weaker people’s cost (Brand, 2015a ). “Socialist” is the most obvious character of Ecological Civilization. Accordingly, any alternative to capitalism must offer better lives for all, a life that not at the cost the nature or the people.

## **Reference**

Brand, Ulrich.(2015a).“Beyond Green Capitalism: Social-Ecological Transformation and Perspectives of a Global Green Left.” Article for lectures at Renmin University and Fudan University.

Brand, Ulrich.(2015b). “ How to get out of the multiple crisis? Towards a critical theory of social-ecological transformation”. To be published in “Environmental Values”.

Brand, Ulrich and Wissen, Markus (2015c).“Social-Ecological Transformation”. In: Noel Castree, Michael Goodchild, Weidong Liu, Audrey Kobayashi, Richard Marston, Douglas Richardson (eds.): *International Encyclopedia of Geography. People, the Earth, Environment, and Technology*. Wiley-Blackwell/Association of American Geographers.

Brand, Ulrich.(2015d). “Eco-Marxism and Beyond: A Critique of hegemonic capitalist societal nature relations. Article for lectures at Wuhan University .

Brand, Ulrich.(2015e). “Green Economy, Green Capitalism and the Imperial Mode of Living: Limits to a prominent strategy, contours of a possible new capitalist formation.” Article for lectures at Peking University and Zhongshan University.

ChinaDaily, “Fujian to pilot ecological civilization construction”, 2014.03.24  
[http://www.chinadaily.com.cn/china/2014-03/24/content\\_17375162.ht](http://www.chinadaily.com.cn/china/2014-03/24/content_17375162.ht)

ChinaDaily, “Fujian to pilot ecological civilization construction”, 2014.03.24  
[http://www.chinadaily.com.cn/china/2014-03/24/content\\_17375162.htm](http://www.chinadaily.com.cn/china/2014-03/24/content_17375162.htm)

Development Research Center of the State council(DRC).(2014). *The Evaluation and Examination Systems for Ecological Construction* . Beijing: China Development Press.

Gørild Heggelund , Ellen Bruzelius Backer.(2007). “China and UN environmental policy: institutional growth, learning and implementation”. *International Environmental Agreements: Politics, Law and Economics*. Volume 7, Issue 4, pp 415-438

Görg, Christoph.(2011). “Societal relationships with Nature: A Dialectical Approach to Environmental Politics”. In Biro,A.(Ed.) *Critical Ecologies. The Frankfurt School and Contemporary Environmental Crises*.University of Toronto Press, pp.43-72.

Haberl, Helmut,Marina Fischer-Kowalski,Fridolin Krausmann, Joan Martinez-Alier and Verena Winiwarter.(2011). “A socio-metabolic transition towards sustainability? Challenges for another Great Transformation”. *Sustainable Development*. 19(1):1-14

Huan, Qingzhi, Xingwu Gao, Yadong Zhong.(2013). *Green Development and Ecological Civilization*. Changsha: Hunan People’s Press. p10.

Huan, Qingzhi (ed.) (2010): *Eco-socialism as politics – rebuilding the basis of our modern civilization*. Dordrecht, the Netherlands: Springer

Huan, Qingzhi.(2014). “Four Dimensions of the Concept of Ecological Civilization: A Theoretical Explanation”. *Jiangnan Forum*. Vol.6.pp.5-10.

Huan, Qingzhi.(2016). “ Ecological Marxism and Ecological Civilization System Innovation”. *Magezin of Nanjing University of Technology*. Vol(1):32-39.

Huang,Guoqin (ed.).(2015). *Jiangxi Ecological Civilization in Construction*. Beijing:China Environment Press.

Jia, Weilie, Yang Yonggang, Zhu Ming. (2013). *Introduction to Ecological Civilization*. Beijing: Central Compilation and Translation Press.

Per-Olof Busch, Helge Jörgens, Kerstin Tews.(2014). “The Global Diffusion of Regulatory Instruments: The Making of a New International Regime”, *The Annals of*

*the American Academy of Political and Social Science*. 8(12).

Poulantzas, Nicos. (1978). *State, Power, Socialism*. London: NLB.

Ren, Bingqiang(2013). “Environmental Governance in the perspective of Ecological Civilization Construction: Problems, Challenge and Policies”. *Political Science Studies*. Vol(5):64-70.

Lu, Feng.(2013). *New Aspects on Ecological Civilization*. Beijing: China Science and Technology Press.

UNEP(United Nations Environment Programme). (2011).*Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. Nairobi: UNEP.

Xinhua Press. [http://language.chinadaily.com.cn/news/2012-11/19/content\\_15941774.htm](http://language.chinadaily.com.cn/news/2012-11/19/content_15941774.htm)

Yan,Geng(ed.)(2015). *Green Book of Eco-Civilization: Annual Report on China's Provincial Eco-Civilization Index(ECI 2015)*. Beijing: Social Science Academy Press.

Xinhua News, April 22. “China signs Paris Agreement on climate change”, [http://news.xinhuanet.com/english/2016-04/23/c\\_135305117.htm](http://news.xinhuanet.com/english/2016-04/23/c_135305117.htm) Accessed on 01 05.2016.

<http://monthlyreview.org/2014/11/01/the-ecological-civilization-debate-in-china/>