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3 **Ecological Civilization:**  
4 **Interpreting the Chinese Past, Projecting the Global Future**

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12  
13 **Abstract**

14  
15 Ecological civilization (*shengtai wenming* 生态文明) has been written into China's  
16 constitution as the ideological framework for the country's environmental policies, laws and  
17 education. It is also increasingly presented not only as a response to environmental  
18 degradation in China, but as a vision for our global future. In this article, scholars from the  
19 disciplines of media science, anthropology and sinology analyse media representations of eco-  
20 civilization in order to explore which values and visions this highly profiled state project  
21 actually entails. The article argues that eco-civilization is best understood as a sociotechnical  
22 imaginary in which cultural and moral virtues constitute key components that are inseparable  
23 from the more well-known technological, judicial, and political goals. The imaginary of eco-  
24 civilization seeks to construct a sense of cultural and national continuity, and to place China at  
25 the center of the world by invoking its civilization's more than 2000 years of traditional  
26 philosophical heritage as a part of the solution for the planet's future. It is constructed as a  
27 new kind of Communist Party led utopia in which market economy and consumption continue  
28 to grow, and where technology and science have solved the basic problems of pollution and  
29 environmental degradation.

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31 **Keywords:** Ecological civilization, sociotechnical imaginary, environmental policy, global  
32 ecological future, eco-philosophy, China

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37 **Introduction**

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39 The concept of ecological civilization, or eco-civilization (*shengtai wenming* 生态文明), may  
40 still sound obscure to readers unfamiliar with Chinese political discourse and civilization  
41 campaigns. In the official English translation of then President Hu Jintao's speech for the 18th  
42 Party Congress in 2012, the Chinese term "*shengtai wenming*" was even translated as  
43 "ecological progress" (rather than "ecological civilization"), possibly in order not to confuse  
44 an international audience unfamiliar with using the term "civilization" in this way. (*China*  
45 *Daily*, 2012). However, since its introduction into China's Communist Party's ideology in  
46 2007, and especially after President Xi Jinping endorsed it in 2013 as a major framework for  
47 the country's environmental laws and policies, it has gained traction in Chinese society and in  
48 2018 it was elevated to a more prominent position in the constitution. Since 2007, more than  
49 4,000 published Chinese articles and books have included eco-civilization as one of their key

50 words, and more than 170,000 articles in mainstream press-media in China have invoked the  
51 concept (Heurtebise, 2017, p. 7). The rest of the world is likely to hear more about ecological  
52 civilization as China strengthens its global position as a climate actor while simultaneously  
53 continuing its policy of rapid economic growth moving beyond China through, most  
54 prominently, the prestigious infrastructure project, the Belt and Road Initiative (*yidai yilu* —  
55 带一路, see e.g. Cai 2017). There is no doubt that the global environmental mark of the  
56 world's second largest economy will continue to grow considerably in the near future. The  
57 rapid increase in China's fossil fuel consumption has long outpaced the scenarios foreseen by  
58 scholars as late as in the 1990s; and already by 2007, China was the world's leader in  
59 emissions of greenhouse gasses (Sternfeld 2018). At the same time, ecological civilization is  
60 promoted as a vision of a society characterized by ecologically sustainable modes of resource  
61 extraction, production and trade, inhabited by environmentally conscious and responsible  
62 citizens.

63 We argue in this article that ecological civilization, or eco-civilization, currently  
64 constitutes the most significant Chinese state-initiated imaginary of our global future, and that  
65 it is therefore crucial to explore in more detail what this vision entails. Does it reflect a desire  
66 for an environmentalist turn towards a world less driven by economic incentives and with  
67 more equal distribution of resources, or is it an attempt to strengthen China's current path of  
68 development? Already now, eco-civilization has become the ideological framework for the  
69 government's development of new and stricter environmental policies and laws, and it has  
70 significant implications for Chinese society, its citizens and the country's international policy  
71 (Delman, 2018; Ahlers and Hansen, 2017; Ahlers and Shen, 2018; Kostka and Nahm, 2017;  
72 Shin, 2017). In fact, the Chinese state with all of its overwhelming environmental problems is  
73 still the only one that has attempted at formulating a broad vision for the global future  
74 focusing on the environment. Eco-civilization emerged as a result of the political leadership's  
75 recognition of the magnitude of environmental and climate related challenges that China is  
76 facing, and as shown in a recent study by Jørgen Delman (2018), it has already had a  
77 profound effect on environmental governance in local areas. However, in addition to setting  
78 an agenda for concrete political initiatives, ecological civilization is an imaginary that draws  
79 on specific interpretations of the Chinese philosophical past in order to create a vision for the  
80 global future that is rooted in national identity. The eco-civilized future is cast as a utopian  
81 alternative to the blind pursuit of industrial growth that developed in what is presented, in  
82 official Chinese discourse, as the destructive Western industrial civilization (*gongye wenming*  
83 工业文明) since the 18th century (Pan, 2003). To paraphrase the Chinese government, the  
84 imaginary of eco-civilization can be described as “a socialist-ecological future with Chinese  
85 characteristics” (Jiang, 2013).

86 The imaginary seeks to construct a sense of Chinese cultural continuity, and by  
87 invoking the very concept of civilization (*wenming* 文明) it also manages to situate itself in a  
88 longer historical tradition in which the Chinese elite, since the early 20th century, has adopted  
89 a dominant Western European understanding of science as a key to civility, and of civility as  
90 a marker of global order (Messner, 2015, p. 241; Pernau and Jordheim, 2015). In our age of  
91 deep global environmental concern, the imaginary of eco-civilization places China at the  
92 center of the world map by invoking its 2500 years of traditional philosophical heritage as  
93 part of a solution for the planet's future. This perception of China's past has flourished among  
94 scholars in China already since the late 1980s (see e.g. Schmitt, 2016, pp. 77–80). However,  
95 our discussion of eco-civilization takes a different direction than these largely normative  
96 debates. We explore, from a critical perspective, how authoritative writers on eco-civilization  
97 and official media have chosen to draw on selected interpretations of traditional philosophical  
98 texts, as well as on lessons or examples drawn from China's socialist pasts, in order to create  
99 a cultural-national basis for the imaginary of eco-civilization. We ask what social,

100 technological, and political values the vision of eco-civilization actually promotes, and how  
101 its key messages are transmitted to the population. How are Chinese citizens introduced to the  
102 promises made by the vision of eco-civilization, and what is expected of future eco-civilized  
103 citizens and government officials.

104 Scholars have approached eco-civilization as an ideology and as a political  
105 framework, plan and vision (e.g. Schmitt, 2016; Delman; Geall, 2015). In order to better  
106 capture its many facets, we suggest (in accordance with Hansen and Liu, 2018) that it is best  
107 understood as a socio-technical imaginary. The reason is that the analytical concept of  
108 sociotechnical imaginary, as first coined by Sheila Jasanoff (2015a, 2015b), opens up for an  
109 analysis of how technological values and visions of the future are interwoven with political,  
110 social and cultural ones. This, we show in the following, is a particularly poignant aspect of  
111 ecological civilization, because while it indeed contains generalized guidelines for how to  
112 develop policies, laws, and technologies for the future, it also constitutes a much broader  
113 moral guide to proper civil behavior and attitude, all based on a specific interpretation of  
114 China's philosophical tradition that helps to strengthen a sense of national continuity. Sheila  
115 Jasanoff defines sociotechnical imaginaries as "collectively held, institutionally stabilized,  
116 and publicly performed visions of desirable futures, animated by shared understandings of  
117 forms of social life and social order attainable through, and supportive of, advances in science  
118 and technology" (Jasanoff, 2015a, p. 4). Eco-civilization, we argue, is a very good example of  
119 a state-initiated sociotechnical imaginary in which cultural and political-moral virtues  
120 constitute key components that are inseparable from technological, judicial, and political  
121 values.

122 Subsequently, we analyse what this imaginary looks like, how it is presented to the  
123 Chinese population and increasingly to the world, and, not least, how it constitutes a unique  
124 interpretation of traditional Chinese philosophy aimed at creating a convincing imaginary of  
125 the future. Our main sources of analysis are a combination of recently published government  
126 sponsored educational material and official documents, together with media representations  
127 going back to 2006, the first time eco-civilization was promoted in a newspaper by Pan Yue,  
128 then deputy director of China's State Environmental Protection Agency. We start with a short  
129 section on how the idea of an eco-civilized China and world relates to the Chinese  
130 government's ultimate goal of continued economic growth. We then move to our more  
131 detailed analysis of three aspects of eco-civilization that are crucial for understanding what  
132 this imaginary means and implies: firstly, how eco-civilization is grounded in contested  
133 interpretations of China's philosophical past; secondly, how science and technology are  
134 presented to the population as keys to achieving ecological civilization; and thirdly, which  
135 moral values eco-civilization projects onto environmental citizens and government officials  
136 expected to strive towards the ultimate goal of ecologically sustainable economic growth.

### 137 138 **Economic growth in an eco-civilized world**

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141 Before moving to the details of how eco-civilization is constructed and communicated, it is  
142 necessary to establish how eco-civilization remains intimately connected to the government's  
143 aim of continued economic growth under the leadership of the Communist Party. In a detailed  
144 discourse analysis of key policy documents related to eco-civilization, Edwin Schmitt has  
145 clearly shown that while there are some specific examples where environmental protection is  
146 privileged over economic development, for instance in cases when it is necessary to control  
147 polluting industries, in general the commitment to economic growth in China is a fundamental  
148 feature of ecological civilization (Schmitt, 2016, pp. 74–111). A few Chinese articles on eco-  
149 civilization have tried to make the argument that China has a unique tradition of economic

150 self-restraint that can also serve as a model to overcome contemporary consumerism created  
151 by Western philosophical tradition and industrial civilization (Pan, 2008). However, in the  
152 dominant versions of eco-civilization continued economic growth is never argued against, and  
153 no documents suggest radical alternative means of, for instance, redistributing wealth and  
154 slowing production in order to prevent further environmental degradation. This is also  
155 confirmed in one of the explicit statements about ecological civilization as a vision not merely  
156 for China but for the common global future. After his election for a second term as president  
157 of the International Union for the Conservation of Nature, former Minister of Education Mr.  
158 Zheng Xinsheng, emphasized in an interview that eco-civilization was meant to be a global  
159 vision *built on the foundation of a culture of commerce*. Eco-civilization was aimed at  
160 transforming the world but without changing the path of global capitalist economic  
161 development. Eco-civilization should not eliminate “commercial civilization” (*shangye*  
162 *wenming* 商业文明), according to the Zheng, because “the two are mutually reinforcing, and  
163 ecological civilization evolves from the very basis of commercial civilization” (interview in  
164 Pang, Pan, and Zhao, 2016). Xi Jinping, in his capacity as Party Secretary in Zhejiang  
165 Province in 2005, used a metaphor that has since become popular in numerous speeches about  
166 eco-civilization, precisely because it emphasizes the economic rationale for keeping the  
167 environment clean: “clear waters and lush mountains are gold and silver” (*lushui qingshan*  
168 *jiushi jinshan yinshan* 绿水青山就是金山银山), meaning that they are invaluable assets.

169 In other words, at the abstract level ecological civilization is an imaginary that insists  
170 on the possibility of transgressing what others have termed the most fundamental double-bind  
171 of 21st-century global capitalism, namely the chronic tension between economic development  
172 and human-ecological sustainability (Eriksen and Schober, 2016). In this way, eco-  
173 civilization is well adapted to the global capitalist order, and it does not suggest any radical  
174 turn towards slow and resilient growth combined with major redistributive measures, either at  
175 the global level or within China. At the same time, eco-civilization insists that Chinese  
176 philosophical traditions valued “ecological harmony” and that these can be revived in order to  
177 create a green future. This future will be essentially different from the so-called “Western  
178 black modernization”, which is seen as a continuation of human-first ethical principles  
179 inherent in Western philosophy, and which, according to Pan, brought us all into the  
180 environmental mess we face today (Pan, 2006a, 2006b). In the officially sanctioned eco-  
181 civilized future, the world has by no means broken free from a growth-based economic  
182 system of production and trade. Instead, in Pan’s reductionist and selective interpretation of  
183 tradition and philosophy, aiming at establishing complete harmony between China’s past and  
184 Marxism, including Xi Jinping’s visions for a eco-friendly future, it is argued that eco-  
185 civilization represents a more advanced state of human civilization. In other words, eco-  
186 civilization is compatible with the Chinese Communist Party’s post-Mao version of  
187 “socialism with Chinese characteristics”, but transcends it by elevating the value and power of  
188 nature while reducing human beings to a central rather than dominant role:

189  
190 According to Western traditional philosophy, mankind is the most  
191 valuable part of the world while nature and other forms of life are targets  
192 for our domination and therefore have no value. Therefore, morality is  
193 only designed for man and there is no need to act morally towards nature  
194 or any other forms of life. This is the philosophical basis for the concept of  
195 man ruling nature in the industrial civilization. The ecological civilization,  
196 however, believes that value exists in both man and nature; nature is also  
197 endowed with the power to take the initiative; and all forms of life depend  
198 on nature, including mankind. Therefore, man must respect life and  
199 nature, as the earth is home to both. (Pan, 2006b)

200  
201 Western “traditional philosophy” is here presented as being in stark contrast with the ideals of  
202 eco-civilization, while a combination of theories of Marx and Engels and selected Chinese  
203 classical texts regarding mankind and nature are elevated, to the status of a philosophical  
204 basis for the eco-civilized imagined future, and further discussed in Pan’s later publications  
205 (2015). Pan argues that eco-civilization constitutes an “advanced form of social harmony,”  
206 thus emphasizing that eco-civilization is not merely a framework for policy- and law-making  
207 aimed at a more environmentally sustainable world, but just as much a vision with socio-  
208 political and moral dimensions.

209 In sum, eco-civilization is envisioned as a cultural ethic of complete harmony (*hexie*  
210 *gongsheng* 和谐共生) between humankind and nature, among human beings themselves, and  
211 in their relation to society (Pan, 2007). It serves as a state promoted imaginary of a Chinese  
212 socialist, and eventually global form of “civilization”, built on growth, production, trade and a  
213 responsible way of dealing with natural resources. The way to achieve this future, according  
214 to the logic of eco-civilization, is through technological and scientific advancements, proper  
215 political planning and implementation, and by means of social control combined with the  
216 population’s heightened environmental consciousness. As shown in the following section, it is  
217 based on a very specific interpretation of ancient Chinese texts.

218

### 219 **Constructing a Chinese eco-tradition**

220

221 Eco-civilization as an imaginary for a global future draws on reductionist and often biased,  
222 interpretations of philosophical and religious traditions in China’s ancient past in order to  
223 make claims to a fundamental difference in the relationship between humankind and nature,  
224 and between Western and Chinese thought. The philosophical basis for the imaginary was  
225 mainly developed by Pan Yue over time, drawing from ideas promoted by scholars in China  
226 already in the 1980s (Marinelli, 2018; Schmitt, 2016, pp. 77–82), His ideas have never  
227 attained a strict, precise or coherent theoretical form, but have rather come to constitute a  
228 polemic basis for later arguments in favor of a specific Chinese eco-tradition. Pan and other  
229 advocates of eco-civilization assert that Chinese tradition is ecocentric, endorsing ideas about  
230 an intrinsic harmony between humankind and nature. In stark contradiction, they argue,  
231 Western tradition is essentially anthropocentric, placing humans in a dominant position vis-à-  
232 vis nature, eventually bringing the world into the “black” and unsustainable development  
233 prompted by industrial civilization. They further maintain that Western civilization long had  
234 the opportunity to develop an ecological vision for the future, but failed to do so precisely  
235 because of its inherent anthropocentrism (Pan, 2003, 2006b; Jiang, 2013). China, on the other  
236 hand, is now able to offer an alternative philosophical basis for an eco-friendly future, due to  
237 what Pan and others regard as a strong eco-tradition firmly rooted in ancient Chinese ethical  
238 values with universal significance:

239

240 Environmental problems in China have a particular significance for global  
241 sustainable development; China’s history is old, and her culture is grand;  
242 China’s environmental culture will broadly absorb the outstanding  
243 achievements of world environmental culture and on this basis will offer to the  
244 peoples of the world a unique style suitable for new times to achieve common  
245 goals. (Pan, 2003)

246

247 Notions of culture, tradition, national identity, and recent experiences of environmental risks  
248 are woven together in a polemic attempt to argue that the key to the global future lies in a  
249 revival of China’s past ecological philosophy.

250 The question remains how central to China's tradition – or rather traditions – such  
251 ideas about harmony between humankind and nature actually are, in particular given what  
252 historical research has long disclosed regarding the considerable environmental destruction  
253 during China's pre-modern past (Elvin, 2004; Marks, 2012). Ecological ethics in China's  
254 philosophical and religious traditions were debated in a series of academic conferences at  
255 Harvard University from 1996 to 1998 that engaged Chinese and American scholars working  
256 on the relationship between religion and ecology, resulting in several major publications (see  
257 Tucker and Williams, 1997; Tucker and Berthrong, 1998; Girardot, Miller, and Liu 2001).  
258 This period therefore became a turning point in the academic understanding of Chinese  
259 philosophies of ecology, and interestingly many of the perspectives expressed in these  
260 volumes on ecological philosophy within Daoism, Buddhism and, most prominently,  
261 Confucianism, are clearly recognizable also in Pan Yue's later expositions from 2003  
262 onwards when he started to develop the theoretical basis for China's imaginary of eco-  
263 civilization.

264 The essential part of Pan Yue's assertions about an intrinsic harmony between  
265 humankind and nature in Confucian philosophy is developed from passages in Confucian  
266 texts on the philosophical concept of the "unity of heaven and man" (*tian ren he yi* 天人合  
267 一). Heaven (*tian* 天) in ancient China represented an ultimate form of authority that was  
268 interpreted differently in different periods and by different people. It could indicate personal  
269 authority, but also highly impersonal forms of power related to the order of the natural world;  
270 for others, it was correlated with social order and human ethics (Graham, 1989, pp. 1, 197,  
271 238–244). However, implicit in all of Pan's writings on eco-civilization and China's eco-  
272 tradition, and in line with many of the articles in the Harvard series, is the identification of  
273 heaven/*tian* with Nature. This approach is applied by Pan in order to translate and interpret  
274 ancient Confucianism into a modern prescription for a future global eco-civilization: "Human  
275 affairs must adhere to the will of Nature (*tian*). [Humans] must take the laws of Nature and  
276 transform them into human rules, must follow the principles of Nature, and only then will the  
277 state be prosperous and the people live in peace" (Pan, 2003). Pan's theory of harmony  
278 between humankind and Nature directs attention to the innate ethical nature (*dexing* 德性) of  
279 human beings. Ignoring empirical evidence from the past, Pan argues that proper ethical  
280 conduct in line with humans' innate ethical nature prescribed by Confucian philosophy, will  
281 ensure care and benevolence for nature, and thus form the basis for ecologically sound  
282 behavior (Pan, 2006a, 2008). Chinese eco-tradition, Pan Yue insists, has not only taught the  
283 philosophy of eco-ethics long before the time of Confucius, but also the *practice* of  
284 environmental protection:

285  
286 Already early on China had its own "environmental culture" (*huanjing wenhua*  
287 环境文化). During the Xia dynasty 4000 years ago, felling trees in spring was  
288 prohibited, as was catching fish, killing young wild animals and collecting bird  
289 eggs in summer. During the Zhou dynasty 3000 years ago, hunting for animals,  
290 catching birds, fishing, logging, and burning fields were strictly regulated  
291 according to the climate and season. During the Qin dynasty 2000 years ago,  
292 harvesting young sprouts and catching young wild animals was strictly  
293 prohibited, and it was forbidden to kill fish and turtles with poison. For every  
294 dynasty and every epoch there were explicit laws and prohibitions to protect  
295 the environment. (Pan, 2003)

296  
297 In all of his writings, Pan highlights examples of regulations that favor protection of natural  
298 resources, but he seems unaware of scholarship that has long demonstrated considerable  
299 levels of environmental degradation caused by demographic pressure, proto-industry and

300 quest for resources and energy in pre-modern China, and in spite of regulations and claims to  
301 eco-ethics in Chinese philosophy (e.g., Elvin, 1993, 2004; Elvin and Liu, 1998).

302 Although Pan mainly draws on Confucianist texts and ideas to create a specific  
303 Chinese version of traditional eco-culture, he also seeks to integrate this with both Daoist and  
304 Buddhist elements. In Daoism, according to Pan, heaven/*tian* does not represent a moral or  
305 political authority, but rather, “the Way (*dao* 道) is modeled on nature (*ziran* 自然)” and the  
306 loftiest principle is humanity’s respect for the laws of nature (Pan, 2003). Similarly, Pan  
307 claims, Buddhism teaches that Buddha nature (*foxing* 佛性) is the unity and the essence of all  
308 things in the universe. It implies that all living things are equal and that all have the right to  
309 exist, affirming an intrinsically ecocentric view of humankind and nature (Pan, 2003, 2006a).  
310 To Pan, Chan Buddhism in particular represents a distinct Chinese interpretation of Buddhist  
311 philosophy, one that has been influenced by Confucian ethics, Chinese philosophical ideas of  
312 unity between heaven and man, and the Daoist ideal of the simplicity of life (Pan, 2008).

313 How, then, does Pan Yue manage to converge these very different traditions with  
314 regard to epistemology, ethics, and humanity’s relation with nature in ancient China? He  
315 devises a notion that all three traditions share one principle, or vision, of humanity’s  
316 relationship with the environment referred to as “allotment” (*du* 度). The concept of allotment  
317 is conveyed in ancient philosophical and religious texts, represented in Chinese politics,  
318 practiced in the everyday lives of Chinese people, and condensed in the expression of Chinese  
319 “ecological wisdom” (*shengtai zhihui* 生态智慧) (Pan, 2008). In this way, Pan constructs and  
320 envisions a common ecological and ecocentric wisdom that he claims runs through Chinese  
321 tradition and is waiting to be revived in the contemporary age. These ideas have found  
322 resonance among policy makers in China, as discussed above, as well as among some  
323 academics. Internationally, Pan’s claims to a unique Chinese eco-tradition have often been  
324 viewed positively, and this scholarly affirmation has been fed back into the Chinese  
325 discourse, as seen, for example, in Chinese references to supportive statements from scholars  
326 like Tu Weiming (Harvard University and Peking University), Homes Rolston (Colorado  
327 State University), Roy Morrison (Southern New Hampshire University), and Alexander  
328 Romanov (Russian Academy of Science).

329 However, this discourse on China’s eco-tradition has its critics. In China, Professor of  
330 Environmental History, Wang Lihua at Nankai University, approves of Pan’s assumption that  
331 philosophical and ethical principles for a sustainable environment are intrinsic to Chinese  
332 tradition, but he questions the assumed correlation between theory and practice. He  
333 recognizes the devastating environmental destruction caused by humans in China’s past and  
334 ascribes the incongruity between principles and historical practice to the loftiness of  
335 philosophical writing that had no practical implications for people’s lives. Contradicting Pan,  
336 Wang argues further that regulations and restrictions on the harvesting of natural resources in  
337 China’s early history were instituted to benefit the ruling elite and not for environmental  
338 purposes (Wang, 2013). The sinologist Heiner Roetz has been even more explicitly critical of  
339 Tu Weiming, Pan, and others’ selective and biased reading of passages from Confucian texts.  
340 Roetz has shown that traditional cosmological philosophy and practice in China were in fact  
341 largely anthropocentric (possibly with the exception of Daoist texts), promoting a worldview  
342 where humankind took charge of nature and mended its deficiencies (Roetz, 2013). Likewise,  
343 Buddhistologist and art historian Henrik H. Sørensen questions Pan’s portrayal of Buddhist  
344 epistemology and argues that Buddhism is primarily a spiritual movement which has  
345 frequently displayed a utilitarian approach to nature (Sørensen, 2013, pp. 90–96).

346 In sum, it is safe to conclude that the imaginary of eco-civilization is built upon a  
347 selective, reductionist and contested interpretation of ancient philosophical traditions and of  
348 China’s past that contradicts evidence about massive environmental destruction throughout  
349 Chinese history. The officially sanctioned version of China’s ecological tradition builds on

350 Pan's assertions of ecocentrism in Chinese philosophy, and indicates that ancient farming  
351 practices were in harmony with ecological principles *because* of China's ancient eco-  
352 tradition, for which there is little evidence. This vision of China's eco-tradition buttresses the  
353 government's environmental policies and promotes, at the same time, national pride in ancient  
354 Chinese tradition and support for socialism, as defined by the Communist Party. It also  
355 promotes certain values of science and technology that we analyse in more detail in the  
356 following section.

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### 359 **The green engine: Science and technology in the imaginary of eco-civilization**

360

361 Science and technology constitute an inherent part of any public discourse on a socio-  
362 technical imaginary. In its early phase, eco-civilization was formulated mainly as cultural  
363 principles and ethics about human beings and nature, and there was limited discursive space  
364 for science and technology. However, gradually and not least after the endorsement of  
365 President Xi Jinping, science and technology have become major components of the vision,  
366 and the driving force towards what is perceived as "the green future." In this way, eco-  
367 civilization has developed from a largely philosophical endeavour into a full-fledged socio-  
368 technical imaginary with political backing.

369 Just as the philosophical vision of eco-civilization is articulated against the backdrop  
370 of industrial civilization, the discussion of science and technology begins with a critical  
371 reflection on their double-edged impact on modernization. Here it is recognized that China's  
372 own economic development, as part of the long-term historical processes of industrialization,  
373 is to blame for many environmental problems, and there is no longer mentioning of specific  
374 "Western" forms of industrialization:

375

376 Especially since the industrial revolution, scientific and technological  
377 advancements have sustained industrialization and created enormous material  
378 wealth, but have also caused the rapid exhaustion of natural resources and the  
379 gradual deterioration of the ecological environment, which directly threatens  
380 the survival and development of humankind. (Ma, 2012)

381

382 According to Ma, a top official from the Ministry of Science and Technology, the  
383 contradiction between traditional industrial civilization and the capacity of the environment is  
384 now so extreme that substantial innovative breakthroughs in science and technology are  
385 urgently needed. An opinion piece carried by the Chinese newspaper *Science & Technology*  
386 *Daily* in 2015 invoked the metaphor of a green engine to portray the ideal relationship  
387 between scientific and technological innovation and eco-civilization (Shen, 2015). On the one  
388 hand, innovations would provide the necessary "motor power" for the building of eco-  
389 civilization, which in itself is metaphorically presented as a machine or an automobile. On the  
390 other hand, such innovations would have to be "green," even though it is acknowledged that  
391 any "engine" would inevitably have its "black" side with negative environmental  
392 consequences. In other words, scientific and technological innovations – rather than a  
393 fundamental change of the world economic system or a redistribution of resources – are seen  
394 as key forces in the development of an eco-civilization.

395 Some of the more recent documents on eco-civilization even highlight specific  
396 technologies that are seen to be compatible with the imaginary of eco-civilization,  
397 distinguishing between "black" and "green" technologies. Bai Chunli, the president of the  
398 Chinese Academy of Sciences, for instance, introduced 15 Strategic Priority Research  
399 Programs, six of which were explicitly described as being closely related to the building of



400 eco-civilization (Bai, 2014). This included, for instance, technologies for cleaner and more  
401 efficient utilization of poor-quality coal, advanced fission energy programs, carbon budgets,  
402 and the control of air pollution. Also, the general Guideline on Accelerating the Development  
403 of Ecological Civilization, issued by the Central Committee of the Communist Party of China  
404 and the State Council in late April 2015, emphasized the leading role of sci-tech innovations  
405 as the primary means to achieve eco-civilization (Xinhua News Agency, 2015). In other  
406 words, technologies used in the processes of industrialization produced the environmental  
407 problems that China and the world are facing, and technologies are now also regarded as the  
408 main tool to solve the problems.

409 Under the headline of “promoting scientific and technological innovations,” the  
410 guideline highlight a number of key areas in which scientific and technological research  
411 should be strengthened, such as energy saving, resource recycling, new energy development,  
412 pollution control, and ecological restoration, all considered to be “green”. In fact, it may be  
413 argued that the imaginary of eco-civilization not only accommodates a smaller sector of the  
414 vast sci-tech world but advocates a paradigm shift in science per se, and in particular in how  
415 Chinese society is expected to perceive and relate to technologies. It points to a new era of  
416 worldwide sci-tech and new forms of industrial revolutions, providing both challenges and  
417 opportunities to green and sustainable developments (see e.g., Bai, 2014; Shen, 2015). The  
418 official Party mouthpiece *People’s Daily*, for instance, published four successive editorials on  
419 eco-civilization, the second of which focused on the green transition as a new form of  
420 modernization and civilization:

421  
422 For the first time, the guideline raises the concept of “greenization” (*lüsehua*  
423 绿色化) and juxtaposes it with new types of industrialization, urbanization,  
424 informatization, and agricultural modernization. From the “new Four  
425 Modernizations” to the “new Five Modernizations,” is a major theoretical  
426 innovation. [...] To a certain extent, the process of modernization is *the*  
427 *transition of civilizations*, including the transition from fossil fuels to  
428 renewable energy, from high-carbon economy to low-carbon economy, from  
429 industrial civilization to eco-civilization. (*People’s Daily*, 2015a, emphasis  
430 added)

431  
432 Clearly, the imaginary of eco-civilization is by no means an abandonment of the official  
433 Chinese vision of socialist modernization as building on state controlled economic growth and  
434 integration into the global capitalist market economy that has been dominant since the late  
435 1970s. Rather, it redefines these political ideals and practices in light of a new imaginary path  
436 of transition in civilization. For instance, in a lecture by Professor in environmental science,  
437 Qian Yi, from Tsinghua University’s Centre for Ecological Civilization in April 2018, a  
438 simple Marxist inspired interpretation of a history of civilizations was outlined. The lecture  
439 was introduced to the audience as a means of “explaining to the foreign participants” in the  
440 seminar what eco-civilization was really meant to be. Qian Yi argued that humans have gone  
441 through three stages of civilization: primitive civilization characterized by fears of nature,  
442 agricultural civilization where people relied on nature, and industrial civilization where the  
443 aim was to conquer nature. The coming stage of evolution, she claimed, was “the advanced  
444 form of human civilization” called eco-civilization. This was presented as an indisputable  
445 scientific outline of history to an audience of university professors and scholars from Norway  
446 and China. It was entirely in line with the official representation of eco-civilization that adds  
447 in some more concrete details (to the Chinese rather than the global audience) that in the 20<sup>th</sup>  
448 century, the Communist Party took China through the early socialist period of heavy state-  
449 owned industrial development and economic isolation during Mao’s tenure, and continued

450 integration into the global market and rapid privatization of production during Deng’s tenure.  
451 The very same Party will, according to the imaginary, now lead China towards a form of new  
452 socialist modernity – “a new era” – in which economic growth, environmental protection, and  
453 global integration amalgamate into a complete harmony. Following this logic, it makes sense  
454 that the government implements a range of new environmental laws and regulations while  
455 still insisting that a growth rate of more than 6 per cent every year is sustainable and  
456 desirable.

457 This vision of the future also has implications for how citizens and officials are  
458 expected to live, and it is presented to the public as a natural course of evolution of Chinese  
459 socialism, building on the combination of a strong national identity and unquestioned  
460 leadership by a Communist Party and charge and in motion. In the public representation of  
461 eco-civilization, older socialist models are therefore revived and injected with new ecological  
462 meanings in line with the imaginary of the future, as we continue to show in the following  
463 section.

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### 466 **Old socialist models, new eco-civilized public**

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468 The idea of ecological-civilization has evolved into a full-fledged socio-technical imaginary  
469 with concrete policy implications and is no longer perceived by the government as an abstract  
470 ideal, but rather as a plausible vision which can be achieved in practice. Therefore, the official  
471 discourse now also constructs and incorporates for the public illuminating examples that are  
472 congruent with the values of ecological civilization and relate them to real-life circumstances.  
473 This discursive move is used to enhance the legitimacy of the imaginary and mobilize the  
474 general public to engage with a promising future by addressing questions such as, who are the  
475 best civil practitioners of this new civilization that can serve as exemplars for others to follow,  
476 and what will an ecologically civilized official or citizen look like.

477 In early December 2017, seven inspirational environmental leaders won the  
478 Champions of the Earth award, the United Nations’ top environmental honor. Three came  
479 from China: Chairman of Elion Resources Group, Mr. Wang Wenbiao won for “a lifetime of  
480 leadership in green industry”; bike-sharing startup Mobike for “exploring market-driven  
481 solutions to air pollution and climate change”; and Saihanba Afforestation Community for  
482 “transforming degraded land into a lush paradise” (Champions of Earth, 2017). For Chinese  
483 official media, garnering nearly half of the awards was a demonstration of China’s “global  
484 leadership in environmental governance” (*China Daily*, 2017b) as “China contributes wisdom  
485 and a course of action for global eco-civilization construction, and ‘Beautiful China’ (*meili*  
486 *Zhongguo* 美丽中国) wins applause from all over the world” (Liu and Li, 2017). However, by  
487 far the most media attention in China has been devoted to Saihanba, because already months  
488 before the UN awards, this state-owned enterprise had become a media symbol of how China  
489 transforms older socialist models into visionary examples of a socialist eco-civilization. Thus,  
490 the case of Saihanba is a good example of how not only ancient Chinese philosophy is used to  
491 breathe life into the imaginary of eco-civilization, but also how China’s socialist legacy is  
492 revitalized and accommodated to this vision.

493 Saihanba is a national forest park covering 75,000 hectares at the southern edge of the  
494 Inner Mongolia Autonomous Region. It was established in 1962 with the aim of reforesting  
495 an area that had become a barren desert due to large-scale land reclamations in the 19th  
496 century and the cause of sandstorms. As part of a larger propaganda campaign called “Green  
497 Development, Green Life” (*lüse fazhan, lüse shenghuo* 绿色发展, 绿色生活), launched  
498 prior to the opening of the 19th CPC National Congress in 2017, more than 80 reporters and  
499 photographers from 19 national and local news media went to Saihanba to conduct interviews.

500 In the subsequent months, hundreds of stories about this afforestation community were posted  
501 on media outlets with headlines highlighting Xi Jinping’s praise of Saihanba for “setting a  
502 great example in China’s pursuit of ecological progress” (*China Daily*, 2017a) and “making  
503 the great motherland more beautiful” (*People’s Daily*, 2017a). Taking *People’s Daily* as  
504 example, this central mouthpiece carried more than forty news stories and opinion pieces  
505 about Saihanba in 2017, including several editorials. From central to provincial and local  
506 media platforms, Saihanba became the primary model and exemplary of the imaginary of eco-  
507 civilization in a society where exemplarity has long been regarded as a highly powerful  
508 transformative moral force (Bakken, 2000). Due to its previous status as a longstanding  
509 socialist model, Saihanba became an exemplary model of how “socialism with Chinese  
510 characteristics” was able to project a new eco-civilized future:

511  
512 In the past 55 years, the foresters at Saihanba, generation after generation,  
513 commit to their mission and work very hard amid grave difficulties. [...] Looking at the  
514 75,000 hectares of immerse forests from the satellite cloud pictures, this vast area of green is  
515 just like an eagle spreading its wings wide, firmly grasping the southern edge of the Otindag  
516 sandy land in Inner Mongolia [...] a green Great Wall, a shield against sand, a guardian of  
517 water sources for Beijing-Tianjin-Hebei region and the north of China.

518  
519 Shouldering the historical mission and political responsibility of  
520 restoring and protecting the environment, people at Saihanba have created a  
521 green miracle in the history of the ecological construction in sandy alpine  
522 regions, a well-deserved exemplar of the building of eco-civilization, and a  
523 vivid illustration of the important thought “clear waters and lush mountains are  
524 gold and silver” that President Xi Jinping has emphasized time and again. (Wu,  
525 Liu and Shi, 2017)

526  
527 In the promotion of Saihanba as a model, there is again a strong focus on the significance of  
528 science and technology as “the golden key to the breakthrough of afforestation” (Shi, 2017),  
529 but at least as important is the emphasis on how the Saihanba “spirit” constitutes a special  
530 moral asset and is a symbol of lessons to be learned for officials and citizens in the new era of  
531 ecological civilization:

532  
533 Decades ago, the first generation of Saihanba people came to this deserted  
534 wasteland with the passion and enthusiasm to make their contributions to the  
535 motherland. They drank snow or rain water, ate steamed corn breads and  
536 pickles, walked against strong wind and blizzards, slept on stone beds with  
537 straw. Due to their fearless spirit, the Saihanba people conquered all the  
538 difficulties and finally created this immortal green monument. (*Guangming  
539 Daily*, 2017).

540  
541 As another editorial in the *People’s Daily* put it, “Saihanba is visually green but its spirit is  
542 red” and it is “the sweet fruit of a long-term struggle of both cadres and masses dedicated to  
543 the Party and the country’s calling” (*People’s Daily*, 2017b). This reinterpretation of the  
544 legacy of the socialist past serves current ideological needs, and articles on eco-civilization  
545 therefore calls for “more Saihanbas” and “Saihanba peoples” (*Guangming Daily*, 2017). The  
546 example is set for others to emulate because, argues the author of an opinion piece in *People’s  
547 Daily*, “everybody is actually the player of the notes of ecological civilization. We might not  
548 be able to be ‘ecological guardians’ like Saihanba people who keep planting trees and

549 protecting the forest, but we could become action takers who cherish ecology, preserve  
550 resources, and protect the environment” (Li, 2017).

551 Saihanba set an example not only for officials but also the ordinary citizens. How then  
552 exactly the population and government officials responsible for putting eco-civilization into  
553 practice are expected to conduct themselves, is presented in an increasing flow of pamphlets,  
554 textbooks, cartoons, posters, and media articles of which the three images below are good  
555 examples.  
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559 Figure 1: “Practice a green way of living, carry forward the governance of water and air.” Source: Hangzhou  
560 Environmental Protection Bureau 2015.  
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562 Figure 1 is representative of many images of the ideal eco-civilized future produced  
563 for public dissemination. It is a cover from a 2015 book that introduces, to readers in Zhejiang  
564 Province, a range of environmental policies and goals based on popularized scientific  
565 presentations of key environmental problems, such as polluted water, soil and air. In this  
566 utopian illustration of the eco-civilized future, a middle-class, happy, young family with two  
567 children—a boy and a girl—lives in a green world with perfect blue skies. Energy is  
568 provided by solar panels and windmills, animals are domesticated but not restrained, a bicycle  
569 is close at hand while a green car is available in the background, and a sorting system for  
570 household garbage is in place. The father in the picture might well be one of the many local  
571 officials in China who are expected to change their behaviour and prioritizations now that  
572 economic growth is not the only top goal for the country and the one-child policy (that used to  
573 be part of the evaluation of cadre performance) has been abandoned. The ultimate goal is now  
574 eco-civilization and Figure 2 below illustrates what the state therefore now expects from the  
575 cadre with ambitions to climb the promotional ladder.  
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Figure 2. Title of image: “Assessment of achievements”

Source: Educational Center of Hangzhou City Environmental Protection Bureau (2014), 34.

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The caption on the staircase reads “Assessment of achievements,” and the first step on the cadre’s ladder indicates the usual and well-known targets set for the local economy (*jingji* 经济). However, the cadre (typically represented as a man in formal office outfit) seems to be pondering how to now also achieve the target on the next step, which is environmental protection (*huanbao* 环保). He smiles, probably in appreciation of the fact that all local governments are expected to pay much more attention to the local environment than was previous the case, but his eye is not yet on the top stair. Still beyond his view, the final step represents ecological civilization, the ultimate amalgamation of economy and environmental protection that the official is supposed to achieve (e.g. Heberer and Senz 2011). Put into words, an editorial in *People’s Daily* (6 June 2015) plainly explicates what the government expects from each leading cadre:

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Every leading cadre has to make eco-civilization a major political task. The results of eco-civilization will be the major criteria for evaluating the quality of modernization and of political ability. If we can take ecological advantages and turn them into economic advantages, if we can take ecological capital and turn it into developmental capital, and if we let the development of green industry lead advancements in economic transformation, then we can turn green development into an entirely new form of national strength and an advantage in international competition. (*People’s Daily*, 2015b)

605 This is no small task, but cadres should expect to receive help from eco-civilized citizens,  
606 especially from the young generation who is now the main target of a large number of moral  
607 eco-civilization campaigns.

608 In one of numerous books for a young readership (Figure 3), we meet again the ideal  
609 middle-class Chinese family. The couple and their daughter are about to step into their car.  
610 The father is dressed in a suit and tie, suggesting that he is a white-collar worker on his way to  
611 work, and the mother is inconveniently wearing a long dress, certainly not on her way to do  
612 any form of manual labor. The child, carrying her school backpack, asks: “Mummy, can we  
613 take the bus instead? The teacher says that if we all drive cars, we won’t have blue skies.”  
614 Looking slightly taken aback, the mother comments that her daughter really understands  
615 things, so “from now on we will drive the car one day less every week, okay?”  
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619 Figure 3. Source: Educational Center of Hangzhou City Environmental Protection Bureau (2012), 4.

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621 Visualized educational campaigns like this one, exposing one exemplary modern  
622 nuclear middle-class family after the other, are supplemented by media reports and articles  
623 explaining the aim of eco-civilization as something much more far-reaching than merely a  
624 change of laws, policies, and technological innovations. It involves “a greening of people’s  
625 ways of life,” a considerable “rise of environmental consciousness” among all citizens, and  
626 changing practices related to consumption and production (*People’s Daily*, 2015a). Eco-  
627 civilization is remaking the socialist models long taught in Chinese schools (Hansen, 2015;  
628 Reed, 1995) and promoted in public media (Bakken 2005) by setting focus on environmental  
629 issues. Through the established PRC process of exemplarity, it propagates the vision that the  
630 Communist Party, having recognized that the country faces profound environmental  
631 problems, now foresees a brighter future in which economic growth have supported an  
632 expanding middle class, and where individuals, communities and political leadership alike  
633 take responsibility for ensuring also an environmentally sustainable world.

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635 **Conclusion**

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Ecological civilization is a governmental framework for developing China’s environmental laws and policies, supporting technological innovations that are seen as essential to solve the country’s enduring and now well-known threats of environmental degradation without hampering economic growth. As we have argued in this article, it is more than that. It is an imaginary of the global future, and it is the Communist Party’s promise to the Chinese population. It holds that under the continued leadership of the Party, it is possible to make a historical move from one kind of “civilization” to another.

Eco-civilization was, at its outset, first a rather incoherent, self-contradictory and partial interpretation of China’s eco-tradition, and a project aimed only at local Chinese readership and society. It was readily adopted by the highest political leadership as an ideology conveniently planted in a nationalist interpretation of the philosophical past. By invoking a Chinese trajectory of traditional eco-philosophy and a reinterpretation of the socialist legacy, the Party was able to develop it into an overall framework for its new environmental policies and goals that had a decided nationalist edge to it. It has now become a political project with bearings for laws and policies at central and local levels, and with consequences for how socialist and moralist campaigns are aimed at broad segments of society. It is an imaginary of a utopian harmonious world in which production and consumption continue to grow, where technology and science have solved the basic problems of pollution and environmental degradation, and in which the Chinese population lives as middle-class citizens under the leadership of the Communist Party.

Eco-civilization also enjoys increasing global appeal, probably because it meets little competition from other global environmental visions for the future. The organization Millennium Alliance for Humanity and the Biosphere expressed a widely shared opinion when it in 2017 stated that “capitalising on failures of U.S. leadership, China is emerging as a potential ‘great green power’ of the 21st century” (Cribb, 2017). Eco-civilization is presented in English on the UN Environment Program website as “an ethical morality and ideology which realizes harmonious co-existence and sustainable development both among people and between them and nature and society, reflecting the progress of civilization” (Zhu, 2016), and the term is used rather uncritically by an independent think-tank “Toward Ecological Civilization” (<http://ecociv.org/#who>), established in 2015 by American academics involved in the study of traditional eco-philosophical trajectories. It has been called “the new enlightenment” by scholar-activist David Korten (2017), and more and more civil organizations seem to join in the appreciation of a powerful state and government that dares to formulate lofty ideals and visions for an ecologically sustainable future.

There is sufficient evidence to argue that this socio-technical imaginary has come to constitute a broader ideological framework for the government’s much needed strengthened policies related to environmental protection and climate change. It has positive implications for environmental governance in local areas of China, and for enhancing the population’s awareness of the environmental challenge. It has also helped to provide the Chinese political leadership with a more positive global image as a responsible climate actor. At the same time, it is by no means a binding political plan, and the documents and representations we have analyzed provide no basis for claiming that eco-civilization is likely to result in profoundly new practices of, for instance, resource extraction, investments, or redistribution of resources. It does not imply an ecological revolution of any kind, and it largely ignores the environmental risks involved in continued global growth dependency. It is first of all an attempt to promote a view of the future in which the existent global capitalist economic system remains intact, but is injected with a firm dose of environmental responsibility on the part of citizens, states and economic actors. It may also be regarded as a revised form of the Communist Party’s idea of “socialism with Chinese characteristics”. It adds to the aim of

686 economic growth and leadership of the Party, the new goal of achieving a safe and sustainable  
687 natural environment for human beings (other species rarely mentioned), and it constructs a  
688 philosophical basis for the imaginary that is inherently Chinese with a nationalist twist.

689 As a sociotechnical imaginary backed by the highest political power in China, eco-  
690 civilization needs to be better understood and monitored as it evolves, for instance, in relation  
691 to practices of new large-scale infrastructure projects abroad, such as the Belt and Road  
692 Initiative. The article has first of all focused on how official authors and media articulate the  
693 imaginary of eco-civilization, and it therefore also leaves open the question of how the  
694 Chinese population receive and evaluate this imaginary, if they accept it as a vision for the  
695 future or regard it as, for instance, a set of empty slogans. Finally, it calls for more research  
696 into alternative, or possibly even counter, narratives of eco-civilization and the environmental  
697 future of China, considering the fact that the CCP and government are persistently portrayed  
698 in official discourse in praising terms as the architect of eco-civilization, while especially  
699 local governments and official are often the targets of public environmental protests and  
700 criticism.

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