

PRAISE FOR TOXIC POLITICS

“Dr. Huang has animated a dry subject and brought it to life. He elegantly combines environmental science, public health, political science, organizational behavior, and his own family and hometown experiences. The writing style is approachable and yet also very careful and precise. The book is a tremendous read. It is a worthy successor or update of Liz Economy’s *The River Runs Black* of 2004. Moreover, this is much more than a scholarly work. The subject and analysis elucidate the conditions that at least 1.4 billion Chinese citizens face every day. The spillover effects of the problem-set that he so eloquently unpacks here will have obvious global consequence. I only hope that the book is translated into many languages. But, most importantly, I hope that it is translated into Chinese and read widely by members of the Chinese public as well as the political establishment in China.”

– Craig Allen, President, US Ambassador (ret),
US–China Business Council

“This book addresses a key question as to how a major environmental health crisis may influence China’s rise. The book systematically reviews the fundamental economic, sociopolitical, foreign policy and health implications of the crisis and its policy response. The book also offers an intriguing assessment of the evolution and implementation of environmental health policies in China. It is a must-read for those who are interested in global environmental health and policy issues.”

– Xi Chen, Associate Professor at Yale University; President,
China Health Policy and Management Society

“Bringing well-researched data to life through poignant personal narratives, Huang documents devastating air, water, and soil pollution – and the Party’s conflicted approach to acknowledging and addressing its toll on citizens’ health. To understand some of

China's most pressing challenges now and in the future, read this book!"

– Dr. Andrew S. Erickson, Professor, Naval War College;
Visiting Scholar, Harvard Fairbank Center

"*Toxic Politics* does not hedge or equivocate. China must first heal its body politic before it will effectively address its environmental slide and heal its people. Willing participation by citizens in environmental and health action, as well as in overall governance, is necessary for a healthy environment and a sustainable great power."

– David M. Lampton, Oksenberg-Rohlen Fellow at the Asia-Pacific
Research Center, Stanford University, and former director of
China Studies, Johns Hopkins –SAIS

"Yanzhong Huang has accomplished a remarkable achievement: he offers us a comprehensive, truly interdisciplinary study of interrelated Chinese political, economic, and societal dynamics through a deep dive into the relationship between two vitally important policy areas, environmental degradation and its effects on citizens' health."

– Andrew Mertha, George and Sadie Hyman Professor and
Director of China Studies, Johns Hopkins University

TOXIC POLITICS

Environmental degradation in China has not only brought a wider range of diseases and other health consequences than previously understood, it has also taken a heavy toll on Chinese society, the economy, and the legitimacy of the Party-state. In *Toxic Politics*, Yanzhong Huang presents new evidence of China's deepening health crisis and challenges the widespread view that China is winning the war on pollution. Although government leaders are learning, stricter and more centralized policy enforcement measures have not been able to substantially reduce pollution or improve public health. Huang connects this failure to pathologies inherent in the institutional structure of the Chinese Party-state, which embeds conflicting incentives for officials and limits the capacity of the state to deliver public goods. *Toxic Politics* reveals a political system that is remarkably resilient but fundamentally flawed. Huang examines the implications for China's future, both domestically and internationally.

Yanzhong Huang is a senior fellow for global health at the Council on Foreign Relations. He is also a professor at the School of Diplomacy and International Relations at Seton Hall University, where he developed the first academic concentration among US schools of international affairs to explicitly address the security and foreign policy aspects of global health issues. His writing has appeared in outlets including *Foreign Affairs*, *Foreign Policy*, the *New York Times*, and the *Washington Post*.

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TOXIC POLITICS

*China's Environmental Health Crisis and Its
Challenge to the Chinese State*
A Council on Foreign Relations Book

Yanzhong Huang

Council on Foreign Relations and Seton Hall University



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*To my father, Huang Yujin,
and to the memory of my mother,
Yan Weiying (1939–2016)*

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Abbreviations

µg/m ³	micrograms per cubic meter
ADB	Asian Development Bank
AHC	adjusted human capital
API	Air Pollution Index
AQSIQ	General Administration of Quality Supervision, Inspection, and Quarantine
AQI	Air Quality Index (instead of API)
ARGs	antibiotic-resistance genes
BLL	blood lead levels
BTH	Beijing–Tianjin–Hebei
CBCGDF	China Biodiversity Conservation and Green Development Foundation
CCG	Center for China and Globalization
CCP	Chinese Communist Party
CCTV	China Central Television
CFR	Council on Foreign Relations
CEPI	central environmental protection inspection
China CDC	China Center for Disease Control and Prevention
CPPCC	Chinese People’s Political Consultative Conference
CNPC	China National Petroleum Corp
CO ₂	carbon dioxide
COP21	2015 United Nations Climate Change Conference
COPD	chronic obstructive pulmonary disease
CVDs	cardiovascular diseases
DALYs	disability-adjusted life years
EIA	environmental impact assessment

LIST OF ABBREVIATIONS

EPA	US Environmental Protection Agency
EPBs	Environmental Protection Bureaus
EPI	Environmental Performance Index
EPIL	environmental public interest litigation
EST	Environmental Supervision Talks
FGD	flue gas desulfurization
GBD	Global Burden of Disease
GW	gigawatts
HDI	Human Development Index
HEI	Health Effects Institute
IHME	Institute for Health Metrics and Evaluation
IOC	International Olympic Committee
IPE	Institute of Public and Environmental Affairs
LNG	liquefied natural gas
MEE	Ministry of Ecology and Environment (2018 successor of the MEP)
MEP	Ministry of Environmental Protection (the successor of SEPA)
MFA	Ministry of Foreign Affairs
MIIT	Ministry of Industry and Information Technology
MLR	Ministry of Land and Resources
MOF	Ministry of Finance
MOA	Ministry of Agriculture
MOFCOM	Ministry of Commerce
MOH	Ministry of Health
MOHURD	Ministry of Housing and Urban-Rural Development
MOST	Ministry of Science and Technology
MOT	Ministry of Transport
MSW	municipal solid waste
MWR	Ministry of Water Resources
NCDs	noncommunicable diseases
NDRC	National Development and Reform Commission
NEA	National Energy Administration
NEMS	National Environment Monitoring Station
NGO	nongovernmental organization
NHFPCC	National Health and Family Planning Commission

LIST OF ABBREVIATIONS

Nimby	“not in my backyard”
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NPC	National People’s Congress
NSFC	National Natural Science Foundation of China
O ₃	ozone
PDP	pollutant discharge permit
PM	particulate matter
PPP	public–private partnerships
PRT	pollution rights trading
PX	paraxylene
REE	rare-earth elements
RSCs	regional supervision centers
SARS	severe acute respiratory syndrome
SASAC	State-owned Assets Supervision and Administration Commission
SEPA	State Environmental Protection Administration (successor of State Environmental Protection Agency)
SEPA	State Environmental Protection Agency
SFDA	State Food and Drug Administration
Sinopec	China Petroleum & Chemical Corporation
SO ₂	sulfur dioxide
SOA	State Oceanic Administration
TEC	total emission control
TVEs	township and village enterprises
UNCHE	UN Conference on the Human Environment
UNEP	United Nations Environment Program
VOCs	volatile organic compounds
VSL	value of a statistical life
WHO	World Health Organization
WTE	waste-to-energy

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