## **Canada Fuel Consumption Guide 2013**

In this blockbuster novel, young protagonist Patrick Wu visits a future world - Vancouver in 2032 - brimming with innovation and hope, where the climate crisis is being tackled, the solar revolution is underway and a new cooperative economy is taking shape. Dauncey's "brilliant book shows solutions to the climate crisis that offer a future rich in opportunity and joy" scientist and award-winning broadcaster David Suzuki. Scientists, activists and politicians are enthusiastic in advance praise for Guy Dauncey's ecotopian novel, Journey To The Future. From Elizabeth May, NDP MP Murray Rankin and UK Green Party leader Caroline Lucas, to activists Tzeporah Berman, Angela Bischoff and Bill McKibben, and scientists David Suzuki, Andrew Weaver and Elisabet Sahtouris, the endorsements for Guy Dauncey's new book are united: Journey To The Future is a gamechanger that must be widely read. In this blockbuster novel, young protagonist Patrick Wu visits a future world - Vancouver in 2032 - brimming with innovation and hope, where the climate crisis is being tackled, the solar revolution is underway and a new cooperative economy is taking shape. But enormous danger still lurks. David R. Boyd, co-chair of Vancouver's Greenest City initiative, says Journey To The Future is "an imaginative tour de force, blending science, philosophy and fiction into a delightful story about how we can and must change the world." About the author, Guy Dauncey Guy Dauncey is a futurist who works to develop a positive vision of a sustainable future and to translate that vision into action. He is founder of the BC Sustainable Energy Association, and the author or co-author of ten books, including the award-winning Cancer: 101 Solutions to a Preventable Epidemic and The Climate Challenge: 101 Solutions to Global Warming. He is an Honorary Member of the Planning Institute of BC, a Fellow of the Findhorn Foundation in Scotland, and a powerful motivational speaker.

This book provides a broad understanding of whether law plays a role in influencing patterns of sustainable consumption and, if so, how. Bringing together legal scholars from the Global South and the Global North, it examines these questions in the context of national, transnational and international law, within single and plural legal systems, and across a range of sector-specific issue areas. The chapters identify how traditional legal disciplines (e.g. constitutional law, consumer law, public procurement, international public law), sector-related regulation (e.g. energy, water, waste), and legal rules in specific areas (e.g. eco-labelling and packing) engage with the concept of sustainable consumption. A number of the contributions describe this relationship by isolating a national legal system, while others approach it from the vantage point of legal pluralism, exploring the conflicts and convergences of rules between multiple international treaties (or guidelines) and those between the rules of international and transnational law (or both) vis-à-vis national legal systems. While sustainable consumption is recognised as an important field of interdisciplinary research linking virtually all social science disciplines, legal scholarship, in contrast, has neglected the importance of the field of sustainable consumption to the law. This book fills the gap.

This book examines the state of the art in green transportation logistics from the perspective of balancing environmental performance in the transportation supply chain while also satisfying traditional economic performance criteria. Part of the book is drawn from the recently completed European Union project Super Green, a three-year project intended to promote the development of European freight corridors in an environmentally friendly manner. Additional chapters cover both the methodological base and the application context of green transportation logistics. Individual chapters look at the policy context; the basics of transportation emissions; Green Corridors basics; the concept of TEN-T (Trans-European Network); Benchmarking of green corridors; the potential role of ICT (Information and Communication Technologies); Green vehicle routing; Reducing maritime CO2 emissions via market based measures and speed and route optimization; Sulphur emissions; Lifecycle

emissions; Green rail transportation; Green air transportation; Green inland navigation and possible areas for further research. Throughout, the book pursues the goal of "win-win" solutions and analyzes the phenomenon of "push-down, pop-up", wherein a change in one aspect of a problem can cause another troubling aspect to arise. For example, speed reduction in maritime transportation can reduce emissions and fuel costs, but could require additional ships and could raise in-transit inventory costs. Or, regulations to reduce sulphur emissions may ultimately increase CO2 elsewhere in the supply chain. The book takes stock at the various tradeoffs that are at stake in the goal of greening the supply chain and looks at where balances can be struck.

The importance of biofuels in greening the transport sector in the future is unquestionable, given the limited available fossil energy resources, the environmental issues associated to the utilization of fossil fuels, and the increasing attention to security of supply. This comprehensive reference presents the latest technology in all aspects of biofuels production, processing, properties, raw materials, and related economic and environmental aspects. Presenting the application of methods and technology with minimum math and theory, it compiles a wide range of topics not usually covered in one single book. It discusses development of new catalysts, reactors, controllers, simulators, online analyzers, and waste minimization as well as design and operational aspects of processing units and financial and economic aspects. The book rounds out by describing properties, specifications, and quality of various biofuel products and new advances and trends towards future technology.

Panama Investment and Business Guide - Strategic and Practical Information Steers buyers through the the confusion and anxiety of new and used vehicle purchases like no other car-and-truck book on the market. "Dr. Phil," along with George Iny and the Editors of the Automobile Protection Association, pull no punches.

'A fantastic compendium of skeptical thinking and the perfect primer for anyone who wants to separate fact from fiction.' Richard Wiseman, author 59 Seconds 'Thorough, informative, and enlightening... If this book does not become required reading for us all, we may well see modern civilization unravel before our eyes.' Neil deGrasse Tyson, author of Astrophysics for People in a Hurry In this tie-in to their popular 'The Skeptics Guide to the Universe' podcast, Steven Novella, along with 'Skeptical Rogues' Bob Novella, Cara Santa Maria, Jay Novella and Evan Bernstein explain the tenets of skeptical thinking and debunk some of the biggest scientific myths, fallacies and conspiracy theories (anti-vaccines, homeopathy, UFO sightings, and many more.) They'll help us try to make sense of what seems like an increasingly crazy world using powerful tools like science and philosophy. The Skeptics' Guide to the Universe is your quide through this maze of modern life. It covers essential critical thinking skills, as well as giving insight into how your brain works and how to avoid common pitfalls in thinking. They discuss the difference between science and pseudoscience, how to recognize common science news tropes, how to discuss conspiracy theories with that crazy colleague of yours. and how to apply all of this to everyday life. As fascinating as it is entertaining, this page turner is your essential guide to seeing through the fake news and media manipulation in our increasingly confusing world.

Lemon-Aid guides steer the confused and anxious buyer through the economic meltdown unlike any other car-and-truck books on the market. U.S. automakers are suddenly awash in profits, and South Koreans and Europeans have gained market shares, while Honda, Nissan, and Toyota have curtailed production following the 2011 tsunami in Japan. Shortages of Japanese new cars and supplier disruptions will likely push used car prices through the roof well into 2012, so what should a savvy buyer do? The all-new Lemon-Aid Used Cars and Trucks 2012-2013 has the answers, including: More vehicles rated, with some

redesigned models that don't perform as well as previous iterations downrated. More roof crash-worthiness ratings along with an expanded cross-border shopping guide. A revised summary of safety- and performance-related defects that are likely to affect rated models. More helpful websites listed in the appendix as well as an updated list of the best and worst "beaters" on the market. More "secret" warranties taken from automaker internal service bulletins and memos than ever.

Defective cars, contaminated food, insurance company abuses, botched vacations, or government errors and indifference ... these issues and more are examined in The Art of Complaining. Phil Edmonston's newest book helps consumers come out ahead when products, services, and organizations fail to deliver.

## 40 CFR Protection of Environment

Fire-derived organic matter, also known as pyrogenic carbon (PyC), is ubiquitous on Earth. It can be found in soils, sediments, water and air. In this wide range of environments, fire-derived organic matter, represents a key component of the organic matter pool, and, in many cases, the largest identifiable group of organic compounds. PyC is also one of the most persistent organic matter fractions in the ecosystems, and its study is, therefore, particularly relevant for the global carbon cycle. From its production during vegetation fires to its transfer into soils, sediments and waters, PyC goes through different transformations, both abiotic and biotic. Contrary to early assumptions, PyC is not inert and interacts strongly with the environment: evidence of microbial decomposition, oxidation patterns and interactions with minerals have been described in different matrices. PyC travels across these different environments and it is modified chemically and physically, but remains persistent. This Research Topic explores important questions in our understanding of fire-derived organic matter, from the characterization and quantification of PyC components, to the transformation and mobilization processes taking place on terrestrial and aquatic ecosystems. The studies compiled here provide novel and, often, unexpected results. They all answer some of the questions posed and, more importantly, provide scope for many more.

Humans are not living within our ecological means. We are using the earth's resources at a pace that cannot be maintained. We have already seen evidence of the fallout associated with ecological overconsumption and continued abuse of environmental systems will create increasing challenges both today and into the future. Our depletion of natural systems minimizes the possibilities available to future generations who are expected to somehow rely on innovation and ingenuity for their survival. Yet, despite the challenges we face, governments, individuals, non-profits, educational institutions, and corporations are all heralding the promise of sustainable development to save our environmental systems from collapse while allowing for uninterrupted economic growth. Today, the concept of sustainability is a widespread goal that nearly everyone supports. At the same

time, almost no one means the same thing when they use the term. Sustainability is so broad and overly used that it seems to mean everything to everyone. The result is that the concept has lost its meaning. In this book, the authors examine the misuses and abuses of "sustainability" and seek to refine and clarify the concept. The authors offer a new definition of sustainability – what they call neosustainability – to help guide policies and practices that respect the primacy of the environment, the natural limits of the environment, and the relationship between environmental, social, and economic systems.

Energy risk has reappeared on the corporate and social agenda with a bang and the complexity of the issues has increased many-fold since the days of the last great wave of concern following the oil crises of the 1970s. Steven Fawkes' Energy Efficiency is a comprehensive guide for managers and policy-makers to the fundamental questions underpinning energy-efficiency and our responses to it: ¢ what do we really mean by energy efficiency? ¢ what is the potential (in different dimensions)? ¢ why it is important? ¢ what management processes lead to optimisation of energy efficiency? ¢ what technologies are useful for improving energy efficiency? ¢ what policies can be used to promote energy efficiency? ¢ how can energy efficiency be financed? ¢ how can energy suppliers engage with energy efficiency? The result is the most comprehensive review to-date of the barriers and opportunities associated with improving energy efficiency. Clearly written and erudite, Steven Fawkes addresses every aspect of energy efficiency, including the huge and vitally important untapped potential offered by effective energy management and the application of existing technology. He also identifies barriers, such as the rebound effect and how they can be mitigated and he provides a comprehensive review of innovative energy efficiency financing options. This book is a 'must read' for anyone with an interest in energy supply and demand reduction.

The Handbook of Clean Energy Systems brings together an international team of experts to present a comprehensive overview of the latest research, developments and practical applications throughout all areas of clean energy systems. Consolidating information which is currently scattered across a wide variety of literature sources, the handbook covers a broad range of topics in this interdisciplinary research field including both fossil and renewable energy systems. The development of intelligent energy systems for efficient energy processes and mitigation technologies for the reduction of environmental pollutants is explored in depth, and environmental, social and economic impacts are also addressed. Topics covered include: Volume 1 - Renewable Energy: Biomass resources and biofuel production; Bioenergy Utilization; Solar Energy; Wind Energy; Geothermal Energy; Tidal Energy. Volume 2 - Clean Energy Conversion Technologies: Steam/Vapor Power Generation; Gas Turbines Power Generation; Reciprocating Engines; Fuel Cells; Cogeneration and Polygeneration. Volume 3 - Mitigation Technologies: Carbon Capture; Negative Emissions System; Carbon Transportation; Carbon Storage; Emission Mitigation

Technologies; Efficiency Improvements and Waste Management; Waste to Energy. Volume 4 - Intelligent Energy Systems: Future Electricity Markets; Diagnostic and Control of Energy Systems; New Electric Transmission Systems; Smart Grid and Modern Electrical Systems; Energy Efficiency of Municipal Energy Systems; Energy Efficiency of Industrial Energy Systems; Consumer Behaviors; Load Control and Management; Electric Car and Hybrid Car; Energy Efficiency Improvement. Volume 5 - Energy Storage: Thermal Energy Storage; Chemical Storage; Mechanical Storage; Electrochemical Storage; Integrated Storage Systems. Volume 6 - Sustainability of Energy Systems: Sustainability Indicators, Evaluation Criteria, and Reporting; Regulation and Policy; Finance and Investment; Emission Trading; Modeling and Analysis of Energy Systems; Energy vs. Development; Low Carbon Economy; Energy Efficiencies and Emission Reduction. Key features: Comprising over 3,500 pages in 6 volumes, HCES presents a comprehensive overview of the latest research, developments and practical applications throughout all areas of clean energy systems, consolidating a wealth of information which is currently scattered across a wide variety of literature sources. In addition to renewable energy systems, HCES also covers processes for the efficient and clean conversion of traditional fuels such as coal, oil and gas, energy storage systems, mitigation technologies for the reduction of environmental pollutants, and the development of intelligent energy systems. Environmental, social and economic impacts of energy systems are also addressed in depth. Published in full colour throughout. Fully indexed with cross referencing within and between all six volumes. Edited by leading researchers from academia and industry who are internationally renowned and active in their respective fields. Published in print and online. The online version is a single publication (i.e. no updates), available for one-time purchase or through annual subscription.

Technology and Policy Options for a Low-Emission Energy System in Canada is an up-to-date, accessible review of options for reducing greenhouse gas emissions and moving Canada toward a low-emission future. It provides an overview of Canada's energy system, an analysis of different energy sources and technologies, and an exploration of the public policies available to support a shift toward low-emission energy sources and technologies.

Autonomous State provides the first detailed examination of the Canadian auto industry, the country's most important economic sector, in the post-war period. In this engrossing book, Dimitry Anastakis chronicles the industry's evolution from the 1973 OPEC embargo to the 1989 Canada—US Free Trade Agreement and looks at its effects on public policy, diplomacy, business enterprise, workers, consumers, and firms. Using an immense array of archival sources, and interviews with some of the key actors in the events, Anastakis examines a fascinating array of topics in recent auto industry and Canadian business and economic history: the impact of new safety, emissions, and fuel economy regulations on the Canadian sector and consumers, the first Chrysler bailout of

1980, the curious life and death of the 1965 Canada-US auto pact, the 'invasion' of Japanese imports and transplant operations, and the end of aggressive auto policy-making with the coming of free trade. More than just an examination of the auto industry, the book provides a rethinking of Canada's tumultuous post-OPEC political and economic evolution, helping to explain the current tribulations of the global auto sector and Canada's place within it. Climate change is at the forefront of ideas about public policy, the economy and labour issues. However, the gendered dimensions of climate change and the public policy issues associated with it in wealthy nations are much less understood. Climate Change and Gender in Rich Countries covers a wide range of issues dealing with work and working life. The book demonstrates the gendered distinctions in both experiences of climate change and the ways that public policy deals with it. The book draws on case studies from the UK, Sweden, Australia, Canada, Spain and the US to address key issues such as: how gendered distinctions affect the most vulnerable; paid and unpaid work; and activism on climate change. It is argued that including gender as part of the analysis will lead to more equitable and stronger societies as solutions to climate change advance. This volume will be of great relevance to students, scholars, trade unionists and international organisations with an interest in climate change, gender, public policy and environmental studies.

The impact of humanity on the earth overshoots the earth's bio-capacity to supply humanity's needs, meaning that people are living off earth's capital rather than its income. However, not all countries are equal and this book explores why apparently similar patterns of daily living can lead to larger and smaller environmental impacts. The contributors describe daily life in many different places in the world and then calculate the environmental impact of these ways of living from the perspective of ecological and carbon footprints. This leads to comparison and discussion of what living within the limits of the planet might mean. Current footprints for countries are derived from national statistics and these hide the variety of impacts made by individual people and the choices they make in their daily lives. This book takes a 'bottom-up' approach by calculating the footprints of daily living. The purpose is to show that small changes in behaviour now could avoid some very challenging problems in the future. Offering a global perspective on the question of sustainable living, this book will be of great interest to anyone with a concern for the future, as well as students and researchers in environmental studies, human geography and development studies.

Everyone knows that the planet is in trouble, but is there a solution? This timely book identifies the most effective ways individuals can be more green in four key areas: home, travel, food, and consumerism. It also describes how citizens can ensure that governments take the actions necessary to make sustainable lifestyles the norm instead of the exception. Environmental lawyer David Boyd and celebrated ecologist David Suzuki provide vital tips for choosing a home,

creating a healthy indoor environment, and decreasing energy and water use — and utility bills. They discuss what readers can do to drive and fly less, profile the most environmentally friendly transportation choices, and explain how to purchase carbon credits, among other suggestions. In addition, they offer simple changes individuals can make in their diet to eat fresher, tastier, healthier food. Included too is invaluable advice about how to buy fewer things and avoid toxic consumer products.

This textbook presents students with a systematic approach for the quantification and management of greenhouse gas emissions (GHG) and provides best practices for optimal carbon management and quantification. The book begins with an overview of climate change basics and goes on to discuss carbon footprint measurements, carbon management concepts, and concludes by presenting carbon reduction solutions with applications for green buildings, smart transportation, waste management, and carbon trading and offsetting. The author provides practical examples and carbon management models that support innovative reduction solutions and presents a roadmap for the implementation and development of carbon management strategies, making it a useful resource for both upper undergraduate and graduate students as well as practitioners seeking a comprehensive framework to conduct carbon management.

Lemon-Aid New Cars and Trucks 2013Dundurn

Competition for energy resources worldwide will almost certainly increase because of population growth and economic expansion, especially in countries such as China and India, with large populations. In addition, environmental concerns with the use of certain energy sources add a complicating factor to decisions about energy use. Therefore there is likely to be an increased commitment around the world to invest in energy systems. The World Scientific Handbook of Energy provides comprehensive, reliable and timely sets of data on energy resources and uses; it gathers in one publication a concise description of the current state-of-the-art for a wide variety of energy resources, including data on resource availability worldwide and at different cost levels. The end use of energy in transportation, residential and industrial areas is outlined, and energy storage, conservation and the impact on the environment included. Experts and key personnel straddling academia and related agencies and industries provide critical data for further exploration and research. Experts in these various areas who provide relevant data for further exploration and research include former Head of the Nuclear Reactors Directorate of the CEA; Director of the Potential Gas Agency, who leads a team of 100 geologists, geophysicists and petroleum engineers; former CEO of an Icelandic engineering company that specializes in the design, construction and operation of "Kalina" binary power plants for geothermal, biomass and industrial waste heat recovery applications; Chairman of the Scottish Hydrogen and Fuel Cells Association; former Director of the Geo-Heat Center at the Oregon Institute of Technology, who received the Patricius Medal from the German Geothermal Association for "his pioneer work in the

direct use of geothermal energy"; Division Director of NETL's Strategic Center for Coal, who provides expert guidance and consultation to major DOE-funded clean coal technology and carbon sequestration demonstration projects; an internationally recognized expert in the physics and technology of Inertial Confinement Fusion (ICF); former Senior Scientist and Director of the Center for Distributed Generation and Thermal Distribution with Washington State University, who was responsible for state policy, technical assistance to resource developers and investigations related to geothermal energy development; a main author on the 2005 Billion Ton Report and 2011 Billion Ton Update; and many more extremely well published and well known individuals straddling academia and related agencies and industries.

Many corporations are finding that the size of their data sets are outgrowing the capability of their systems to store and process them. The data is becoming too big to manage and use with traditional tools. The solution: implementing a big data system. As Big Data Made Easy: A Working Guide to the Complete Hadoop Toolset shows, Apache Hadoop offers a scalable, fault-tolerant system for storing and processing data in parallel. It has a very rich toolset that allows for storage (Hadoop), configuration (YARN and ZooKeeper), collection (Nutch and Solr), processing (Storm, Pig, and Map Reduce), scheduling (Oozie), moving (Sqoop and Avro), monitoring (Chukwa, Ambari, and Hue), testing (Big Top), and analysis (Hive). The problem is that the Internet offers IT pros wading into big data many versions of the truth and some outright falsehoods born of ignorance. What is needed is a book just like this one: a wide-ranging but easily understood set of instructions to explain where to get Hadoop tools, what they can do, how to install them, how to configure them, how to integrate them, and how to use them successfully. And you need an expert who has worked in this area for a decade—someone just like author and big data expert Mike Frampton. Big Data Made Easy approaches the problem of managing massive data sets from a systems perspective, and it explains the roles for each project (like architect and tester, for example) and shows how the Hadoop toolset can be used at each system stage. It explains, in an easily understood manner and through numerous examples, how to use each tool. The book also explains the sliding scale of tools available depending upon data size and when and how to use them. Big Data Made Easy shows developers and architects, as well as testers and project managers, how to: Store big data Configure big data Process big data Schedule processes Move data among SQL and NoSQL systems Monitor data Perform big data analytics Report on big data processes and projects Test big data systems Big Data Made Easy also explains the best part, which is that this toolset is free. Anyone can download it and—with the help of this book—start to use it within a day. With the skills this book will teach you under your belt, you will add value to your company or client immediately, not to mention your career.

This publication presents the results of a survey conducted in 2011 on household behaviour regarding energy, food, transport, waste and water and covering 11

countries. This edition replaces the one posted in 2011.

Offers advice for prospective buyers of cars and trucks, reveals information on secret warranties and confidential service bulletins, and tells how to complain and get results.

With a current world population that exceeds seven billion, resource consumption awareness is more important than ever. Investing in sustainable technologies and renewable resources is a necessary step to ensure the future quality of life of all human beings. The Handbook of Research on Sustainable Development and Economics explores topics such as poverty, gender equality, health, security, and the environment through global empirical studies and fundamental frameworks. With the goal of promoting sustainable techniques for the global future, this handbook is a critical reference for business leaders, educators, policymakers, environmental specialists, and the public at large.

Sustainability is a concept that has monopolised a large number of the scientific debates in a wide range of spheres connected not only with architecture, urban planning and construction, but also with the product market, tourism, culture, etc. However, sustainability is indissolubly linked to vernacular architecture and the lessons this architectu

Energy technology innovation - improving how we produce and use energy - is critical for a transition towards sustainability. This book presents a rich set of twenty case studies of energy technology innovation embedded within a unifying conceptual framework. It provides insights into why some innovation efforts have been more successful than others, and draws important policy conclusions. The case studies cover a wide range of energy technologies, ranging from energy supply to energy end use, from successes to failures and from industrialized, emerging and developing economies. The case studies are presented by an international group of eminent scholars under the auspices of the Global Energy Assessment (GEA), whose main volume was published in 2012 by Cambridge University Press. Energy Technology Innovation presents new data, new concepts and novel analytical and policy perspectives. It will prove to be invaluable for researchers, policy makers, economists, industrial innovators and entrepreneurs in the field of energy technology.

Guide to Food Safety and Quality During Transportation provides a sound foundation for the improvement of the transportation sector responsible for the movement of food. While food safety agencies have been focused on producer, processor, retail, and restaurant food safety, the industry that moves the food has been largely overlooked. Ensuring trucks and containers are properly cleaned and disinfected, proper maintenance of refrigeration temperatures during transport, and avoiding paperwork delays are all areas of concern. Lack of government oversight has resulted in multiple, non-standardized approaches to food safety that are inspection-dependent. This book focuses specifically on the food movers normally overlooked by today's food safety auditors, compliance schemes, government agencies, quality control personnel, and transportation

executives. It outlines delivery control solutions and provides basic standards designed to protect the transportation industry, as well as addressing problems associated with food transportation and practical solutions that are focused on container sanitation and traceability food safety and quality needs. Explores food transportation in transition including science, research, current writings and law, bringing the reader quickly up to date on industry practices and trends Presents case studies of the latest resources for identifying, tracking, and addressing safe transport issues Includes FDA and USDA Guidance information, standards and certification, and food safety and quality planning procedures to establish a foundation for transportation system prevention, implementation, standardization, measurement and improvement

Danny Barney covers everything you need to know to successfully grow and market your own organic orchard fruits. Offering expert tips on selecting the right site, choosing the best cultivars, designing and maintaining a sustainable orchard, and efficiently harvesting fruit, Barney also helps you develop a viable business plan, acquire necessary organic certifications, and identify niche markets for your products.

This is the third Environmental Performance Review of Canada. It evaluates progress towards sustainable development and green growth, with special features on climate change mitigation and urban wastewater management. Lemon-Aid New and Used Cars and Trucks 1990-2015 steers the confused and anxious buyer through the purchase of new and used vehicles unlike any other car-and-truck book on the market. "Dr. Phil," Canada's best-known automotive expert for more than 42 years, pulls no punches.

The CSI Sustainable Design and Construction Practice Guide is a compilation of information and recommended best practices for those who participate in the design and construction of commercial-level sustainable facilities. It offers guidelines and standards for applying sustainable design and construction principles in practical terms. This Practice Guide includes an overview of sustainable design standards and rating systems; an overview of green products and systems, and how to evaluate them; the lifecycle of a building; and the roles and responsibilities of members of the design and construction team.

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