



HIGH MEADOWS
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Business Leadership in Public-Private Partnerships for Public Benefit

A working paper prepared for High Meadows Institute



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Purpose and Scope

The purpose of this report is to provide a review and analysis of the unique ways in which businesses are taking a leadership role in collaborations with government and civil organizations to address important social issues. The **first** section provides the context for why the private sector is increasingly engaging in these types of collaborations. The **second** section provides a methodology for categorizing the key forms of public-private sector engagements for public benefit. The **third** section covers six case studies from each of three key areas: “collaborative governance,” “public services,” and “societal challenges.” These case studies have been chosen to demonstrate both the potential benefits and challenges of these types of partnerships. The **fourth** section is a discussion of the lessons learned from these cases. Finally, the **appendices** provide a list of organizations working on PPPs and a review of relevant literature.

1. Context

The 21st century has brought with it profound challenges to our economic and social wellbeing. We now face an accelerating pace of change and disruption to our social and political institutions, as well as increasing global systemic-level threats, from global warming to pandemics and income inequality. As governments prove increasingly incapable of tackling these challenges alone, it is not surprising that large firms are now looked to by the public and their stakeholders, from activist investors to employees and customers, to take greater responsibility and leadership in managing their impact on society, and to engage with government and others to address pressing social challenges. Sixty-eight percent of respondents in the 2021 Edelman Trust Barometer survey believe that CEOs should step in when the government does not fix societal problems and 65% say that CEOs should hold themselves accountable to the public and not just to the board of directors or stockholders.ⁱ In response to these expectations, it is not surprising that we are seeing business take greater leadership in both developing and participating in public-private partnerships to address social challenges.

In this report, we explore the different forms in which business is now both leading and partnering with government and others in public-private partnerships. As will become evident throughout this report, there is no single definition for the term “public-private partnership.” Nonetheless, a good starting point for a definition is that a PPP “leverages private expertise, energy, and money by strategically sharing control – over the precise goals to be pursued and the means for pursuing them – between government and private players.”ⁱⁱ

The idea of *sharing control* is essential, because not every interaction between governments and the private

sector can be considered a partnership. “From the short and simple list of stances a private organization could take in its dealings with government – constituent, contractor, taxpayer, grantee, lobbyist, advisor – the repertoire of potential roles has grown richer, more sophisticated, and, not surprisingly, more confusing.”ⁱⁱⁱ

Furthermore, that initial definition must be expanded, for it is not always the case that authority is outsourced to the private sector by a *government* body. Authority is increasingly being assumed from the outset by multilateral institutions, NGOs, and even corporations themselves. As such, the concept of the public-private partnership has expanded from simple service delivery to areas such as the authority to set the rules of business, as well as the duty to address societal challenges.

While the allocation of authority to new actors might be exactly what is needed to address pressing social needs, this new form of delegation of authority to the private sector is not without challenges. The private sector possesses considerable resources – not just money, but also intellect, information, and creativity – that can be put to effective use in addressing these issues, but they may lack experience in working on social issues and in working in a not-for-profit collaboration that they do not have ultimate control over.

Governments, for their part, may be ideologically opposed to delegating authority to private sector actors and may also lack experience in how to participate in initiatives that they do not solely control. Several of the PPPs discussed herein will demonstrate the challenges governments, NGOs and the private sector may face in trying to build effective collaborations.

2. Categorization of Partnerships

As has been discussed, the term “public-private partnership” has many meanings. The term has been used to describe a long list of ways in which private and public and civil sector institutions interact, such as through regulation, fulfillment of contracts, donations, and project financing. However, these interactions are only tangential to the central issue that this report aims to address: in what ways has business taken a *leadership* role in *collaborating* with public and civil sector institutions to address *significant* societal issues?

Each of the three words in italics is essential to consider. Where business doesn't take a true *leadership* role, we see common government or NGO initiatives



that involve business in some limited way (e.g., to provide funding). Where companies don't *collaborate* with public sector organizations, we see isolated corporate philanthropy programs, which are little able to achieve any solutions at scale. Where the partnership doesn't address *significant* societal problems (i.e., those that span at least an industry), we often find that it is structured to primarily benefit the company itself.

To isolate the partnerships of interest for this report, a series of three tests has been developed; a partnership must pass all three to be considered a relevant case:

1. **The *collaboration test*:** the partnership must be *collaborative*. The key factor in determining if the partnership is sufficiently collaborative is the degree to which several parties share discretion to shape the program.¹
2. **The *business leadership test*:** the partnership must be led in large part by *business*.
3. **The *scope-of-impact test*:** the partnership must seek to solve challenges that are significantly larger than the business's private concerns. That is, the partnership must demonstrate the potential to be scaled up to solve a systemic *societal* issue.²

1. Government regulation of private entities or private sector fulfillment of government contracts fall short of true collaboration, in the sense of a shared control of the goal setting, planning, and implementation of the project. In corporate philanthropy, the discretion lies entirely with the corporation, while in government contracts, the discretion lies entirely with the government. See Donahue and Zeckhauser (2011), pages x (in the foreword) and 10-11 2. Addressing smaller issues (such as park management at the local scale) could still be considered a PPP, but this report focuses on large-scale challenges. It should be noted that the private sector provides many critically important services to society (provision of food, water, communication devices, etc.), but most of these are not addressed here, because this report focuses on efforts by business to solve challenges that go beyond the services that companies naturally provide in a free market.

There are several reasons why it is especially important to consider examples of partnerships that pass these three tests in particular. First, it is becoming increasingly clear that issues that have traditionally fallen outside of business's purview are now presenting themselves as materially important for companies to address to maintain trust and stakeholder support. Second, demands are now being made of companies by consumers, investors, and the media to solve societal challenges. Finally, it is clear that governments alone cannot address the systemic challenges we now face and ensure the health of the operating environment, e.g., an educated workforce, on which business success depends.

Public-private partnerships of the variety that this report is concerned with can largely be placed into three categories. First are those that are aimed at building **collaborative governance** structures to set rules and standards for responsible business conduct. These include initiatives such as those that set standards for business conduct and reporting, create product labeling schemes, and aim to improve business operations

across an industry or sector. The second category is the provision of **public goods and services**. These include collaboration to provide drinking water, education, public infrastructure, and other services. Finally, there are the initiatives that aim to solve larger-scale **societal challenges**, such as climate change, loss of biodiversity and income inequality.



3. Case Studies

The following six case studies have been selected not just to exhibit good practices in constructing PPPs, but also to demonstrate both the positive and negative aspects of this variety of partnership. Some are largely considered successes, and others, failures. What they do have in common is that each demonstrates the unique combination of being *collaborative*, led by *business*, and aimed at addressing a *significant challenge*. Two cases have been chosen from each category. Of collaborative governance partnerships, the **Sustainable Apparel Coalition** and the **Collaboration to End Child**

Labor in the Chocolate and Cocoa Industry have been profiled. Of public service delivery collaborations, the **Pathways in Technology Early College High School** and **Broadband Technology Opportunities Program** have been covered. Of collaborations that aim to address global systemic challenges, the report covers the **US Climate Action Partnership** for the issue of climate change and **Operation Warp Speed** for the issue of COVID-19 vaccine development. The lessons learned from these cases have been synthesized in the Discussion section that follows.

Sustainable Apparel Coalition

A unique beginning

The Sustainable Apparel Coalition (SAC) was created in 2010 by an unlikely duo: Patagonia and Walmart.

The group started after Yvon Chouinard (CEO of Patagonia) and John Fleming (chief merchandising officer of Walmart) sent out an invitation to collaborate on an industry sustainability standard to a select group of retailers, manufacturers, NGOs, academics, and the US EPA.^{iv} Part of their pitch was that “standardization will enable us to maximize sustainability benefits for all buyers without investing in multiple sustainability technologies and certification processes. . .”^v

Perhaps the most unique aspect of the group from the outset was its culture of openness. “My competitors, Target, Kohl’s and J.C. Penney, couldn’t believe that I was taking them around the office,” said Mary Fox, Walmart’s senior vice

president for apparel sourcing. This initial openness would set the tone for later meetings, which were held at various member companies’ offices. The rotation of meetings in company offices proved to be “invaluable as a means of increasing trust and openness.”^{vii}

Walmart’s sustainability advisors, Blu Skye Consulting, were hired to coordinate the Coalition and served as a strategic advisor in framing the initial strategy, a neutral party to convene the group, and a meeting facilitator.^{viii} Walmart agreed to provide the initial funding for the group.^{ix}

The right approach

The aim of the group was to create an index of social and environmental performance for the industry. Consumer demand for better environmental and social performance in the apparel industry had led to a situation in which “virtually

all of the big apparel companies – to the dismay of their suppliers – have their own code of conduct, inspectors and reporting system.”^x Thus, it was an industry in which collaboration looked especially useful to the companies.^{xi}

The meetings of the Coalition are notable for their emphasis on practicality and results, rather than getting caught up on developing the perfect outcome.^{xii} To begin developing an index of environmental/social performance, the group searched for existing work that they could build off of. Two existing tools were chosen: Nike’s Apparel Environmental Design Tool^{xiii} and the Eco Index,^{xiv} which was co-created by the Outdoor Industry Association,^{xv} the Zero Waste International Alliance,^{xvi} and the European Outdoor Group.^{xvii} The Eco Index was the result of several years’ worth of work by more than 100 companies, and Nike’s tool had taken several years and millions of dollars to create.^{xviii}

Building progress

The goal of creating an index for companies to assess the lifecycle impacts of their products was achieved with the release of the “Higg Index” in mid-2012. Today, the Higg Index comprises five modules that together assess the social and environmental performance of the supply chain, as well as the environmental impacts of products. As part of the rules for membership in the SAC, all members must commit to using the index in some way.^{xix}

As membership has increased since 2010, the coalition has grown to include more than 280 global brands, retailers, manufacturers, NGOs, academics, and industry associations along the whole supply chain, representing about half of the global market in apparel and footwear.^{xx} The SAC is funded by membership dues based on each company’s annual revenue, with members receiving access to the Higg Index as well as webinars and meetings, opportunities to participate on committees and task forces, eligibility to serve on the SAC board of directors and voting rights on SAC issues.^{xxi}

A model for collaboration

Said Jason Kibbey, Executive Director of the SAC: “What you see from our members is a belief that company-

based solutions alone are no longer capable of solving the sustainable challenges of our time nor are they cost effective, or efficient or just the right way to go anymore.”^{xxii}

The director of NRDC’s Health and Environment Program echoed many commentators’ sentiments in noting that “this is a model for how industries can collaborate.”^{xxiii}

Controversy

In the more than a decade since its inception, the SAC has faced repeated accusations of “greenwashing” due to complaints of poor data quality and lack of transparency in sharing data with consumers and investors. Coalition members have also been slow to use the Higg Index, preferring their own internal tracking tools, and there has been little evidence to indicate that those that did use it were reducing, and not just reporting, their impact.^{xxiv}

In 2019, the Higg Index spun off into a for-profit public benefit corporation, Higg Co., in hopes of more effectively scaling up their operations^{xxv} and in 2021, the company began rolling out its first consumer-facing product tool. But in June 2022, following a ruling from the Norwegian Consumer Authority (NCA), which found that outerwear brand Norrøna and H&M Group could no longer use the tool to market its products due to its potential to mislead consumers and concern over data quality, the SAC announced it was pausing the use of the Higg Index until it could work with regulators and consumer agencies “to better understand how to substantiate product level claims with trusted and credible data.”^{xxvi} However, the SAC pledged to continue its commitment to collaboration and sustainability and in 2023, announced that all corporate members would be required to set and commit to Science Based Targets (SBTs) to reduce carbon emissions.

“Members are listening and learning from each other to address the most pressing and difficult issues we are all facing in different geographical regions, driving shared solutions to shared problems and making sure our targets become a reality,” said Joyce Tsoi, Director of Collective Action Programs at the SAC. “It’s the only way we can ensure our industry has a future.”^{xxvii}

Collaboration to End Child Labor in the Chocolate and Cocoa Industry

The Harkin-Engel Protocol

Companies whose business depends on cocoa production have been working for some time on ensuring stability in their supply chain, but the beginning of the large-scale collaborative efforts to deal with child labor in the chocolate and cocoa industry lies in the 2001 agreement developed by representatives of the industry in collaboration with US Senator Tom Harkin and US Representative Eliot Engel, known as the Harkin-Engel Protocol.^{xxviii} This agreement led to the establishment of a voluntary certification program for cocoa farming, as well as two non-governmental organizations.

The first of these organizations is known as the World Cocoa Foundation, which is dedicated to improving productivity and sustainability in small-scale cocoa farms.^{xxix}

The second organization that came out of the Harkin-Engel Protocol is the International Cocoa Initiative (ICI), designed to provide information on best practices in the industry. ICI is described as a “multi-stakeholder partnership advancing the elimination of child labour and forced labour, by uniting the forces of the cocoa and chocolate industry, civil society, farming communities, governments, international organizations and donors.”^{xxx}

The Department of Labor gets involved

By the end of the decade, it became clear that more coordinated action was necessary to address the issue of child labor in cocoa production. In 2010, the governments of Côte d’Ivoire and Ghana, the U.S. Department of Labor and representatives from the cocoa and chocolate industry came together to sign the Declaration of Joint Action to Support Implementation of the Harkin-Engel Protocol.^{xxxi}

The declaration included the formation of the Child Labor Cocoa Coordinating Group (CLCCG), a PPP with the goal of reducing the worst forms of child labor in cocoa growing areas by 70 percent by 2020, through efforts including educational and vocational training, improving workplace conditions,

and establishing community-based child labor monitoring systems. Eight companies, including ADM, Barry Callebaut, Cargill, Ferrero, The Hershey Company, Mars Incorporated, Mondelez International and Nestlé, committed an initial \$10 million to programs related to the CLCCG.^{xxxii}

Impacts

It was essential that Ghana and Côte d’Ivoire be involved in this initiative, because they are the world’s largest cocoa producers, accounting for 60% of production.^{xxxiii} In Côte d’Ivoire, more than 50% of household income depends on the cocoa industry.^{xxxiv} In response to the 2001 agreement, the government of Côte d’Ivoire established a number of important programs, including preventative actions, legal action against child traffickers, and training programs.^{xxxv}

An additional benefit of the PPP is that the parties to the partnership are coordinating with the International Cocoa Initiative and the International Labour Organization (ILO). The eight companies partnering with the CLCCG are members of the ICI, which has allowed the ILO’s International Programme on the Elimination of Child Labour (IPEC) to provide advisory services to the ICI’s board.^{xxxvi}

Overall results of the initiative have been mixed so far. A study published in 2020 found no difference in the rate of child labor in cocoa production in either Ghana or Côte d’Ivoire since 2013. However, since overall cocoa production increased significantly during that time period, this may indicate a small positive impact from intervention measures.^{xxxvii} A separate study found that communities that received significant exposure to multiple CLCCG intervention programs decreased hazardous child labor by up to one-third.^{xxxviii} In response to the recommendations from these reports, the WCF, which represents the chocolate and cocoa industry in the CLCCG, pledged that member companies will increase the coverage of child labor monitoring and remediation systems to 100% throughout their supply chains by 2025 and committed a further \$65 million for social development activities.^{xxxix} Whether this will encourage further progress remains to be seen.

Pathways in Technology Early College High School

A new model for education

Pathways in Technology Early College High School (P-TECH) is a public high school that opened in New York City in 2011, through a collaboration between IBM, the New York City College of Technology (one of the colleges of the City University of New York), and the city's Department of Education. P-TECH was designed to offer a holistic approach to education and workforce development, address the workplace "skills gap" and provide underserved youth with a direct pathway to college attainment and career readiness.^{xi} P-TECH describes itself as a "first of its kind 9-14 school model, which combines high school, college and the world of work."^{xii}

Under the unique P-TECH model, students attend the school for grades 9-14, earning their high school diploma and a two-year postsecondary degree in a STEM field. The curriculum is designed collaboratively by the three partners and emphasizes college readiness skills and career competencies through closer alignment with higher education and industry standards. The program is supplemented with mentorships, special projects, guest speakers, worksite visits, internships, and apprenticeships to ensure students are equipped with the necessary skills to enter the workforce upon graduation.^{xiii} Students primarily come from the surrounding neighborhoods of the school in Brooklyn, are not screened or tested for admission and attend all six years free of charge.^{xiii}

"P-TECH was never planned as a single or charter school serving a small number of fortunate students. The broader goal always has been to apply the knowledge and experiences developed in this pilot school to serve as a model for use by other traditional high schools in New York City, nationally and globally."^{xiv}

Commitment from partners

One of the primary reasons that P-TECH has enjoyed considerable success and praise is that its three partners

complement each other's roles so well, and that each is committed to making the project a success.

For the NYC Department of Education's part, it clearly has an interest in making the school a success, as that is its mandate. For the college's part, City Tech (as it is known) has been commended for its engagement in local economic development.^{xv} And for IBM's part, it has proven that it has the exceptional expertise, vision, and commitment to make the school a success.

It is especially important for the corporate partner in a project like this to understand what will be required of it:

Many of the most successful corporate-school partnerships are designed as collaborations where there are clear expectations of each partner's commitment and obligations—especially where the partnership is based on more than just providing financial resources. For example, corporations need a clear understanding of what types of resources—internships, mentors, summer jobs—are needed from them, and for how long.^{xvi}

IBM clearly understood the need for it to be highly involved in the school. "After many years of involvement in education and other philanthropic efforts, IBM leadership came to the conclusion that, in order to have a lasting impact, their involvement must be both sustained and systemic. Short-term projects based mostly on writing checks proved to have only limited success."^{xvii}

The company is highly represented in the Steering Committee for P-TECH, which met regularly for nearly a year during the planning stage in the lead up to the school's opening and continues to meet monthly to guide decisions for the school.^{xviii} IBM helped design the curriculum for the school, providing the minimum requirements for entry-level IT jobs and working with high school and college faculty to map those skills to the syllabus.^{xix} Both IBM and City Tech have also provided a full-time employee to the school: an Industry Liaison and an Early College Liaison.ⁱ IBM has

also committed to providing job interviews to all qualified graduates of P-TECH schools associated with the company.^{li}

IBM's priorities

IBM's commitment to the success of P-TECH has been demonstrated, but the question remains: why would it fall to a corporation to take the lead in improving education?

The answer is partly explained by the reasons that any corporation undertakes philanthropy – to build brand value, maintain social license to operate, etc. But IBM, as a technology company, can also benefit strategically from the initiative, in that it is ensuring a steadier supply of trained IT professionals to join its ranks.

This should not lower one's respect for the program; rather, the strategic advantages that IBM gains should be taken as a model for how companies can create collateral benefits in pursuing their own best interest. Solutions to social problems will never get to scale by relying on philanthropy.

Scaling up

The original P-TECH school in Brooklyn has grown to over 500 students^{lii} and is now being used as an example for other locations. The P-TECH model has been replicated

in more than 300 schools in 28 countries, partnering with over 600 large and small companies across a wide range of sectors, including health IT, advanced manufacturing, and energy technology.^{liii} The P-TECH website offers resources and support for education and business leaders looking to establish their own P-TECH school, including a blueprint, roadmap and teacher toolkit.^{liv}

The P-TECH model is already showing promising results in meeting the needs of underserved youth. A 2020 study by MDRC found that students at P-TECH Brooklyn and six other New York City P-TECH schools outperformed students from similar backgrounds on state-wide standardized tests and earned more college credits over a three-year period. New York State has allocated approximately \$40 million in funding to expanding the P-TECH program, making it a leader in P-TECH student enrollment.^{lv}

Over the next ten years the P-TECH Industry Coalition, an alliance of American businesses committed to creating a more inclusive economy, plans to partner with state and local governments to increase the number of P-TECH schools in the U.S.^{lvi}

P-TECH has proven itself as a viable and scalable educational model, and it is building a very hopeful path for secondary education.



Broadband Technology Opportunities Program

Expanding access

Broadband connectivity is critical to economic development and serves a vital role in improving education, health care, employment opportunities, and public safety, but many rural and isolated communities in the U.S. still lack broadband access. A report by the National Telecommunications and Information Administration (NTIA) found that in 2007, 49 percent of Americans, and 61 percent of rural Americans, did not have access to broadband service.^{lvi}

In 2009, the American Recovery and Reinvestment Act established the Broadband Technology Opportunities Program (BTOP) to promote digital inclusion and expand broadband internet access in unserved and underserved communities.^{lviii} The program encouraged collaboration between state and local governments, private companies and non-profits to share the costs and risks of building and operating broadband networks.^{lix} In 2010, the NTIA invested approximately \$4 billion in 233 BTOP projects across every state and the projects began rolling out over the next decade.

The following example illustrates how BTOP worked in practice.

Maine Fiber Company

Maine Fiber Company (MFC) is a private company that leases unused “dark” fiber networks to internet service providers, formed in 2010 to oversee the construction and maintenance of a high-capacity fiber optic network to provide broadband service throughout Maine. That same year, Maine’s state government enacted a new law that established “dark fiber provider” as a new category of public utility. This action allowed MFC to enter the marketplace. NTIA provided a \$25.4 million grant, and the company contributed \$6.1 million in investor funding to deploy a 1,211-mile network. This private-sector led project is an example of a unique collaboration between a state government and a private company to both provide financing and remove barriers to market entry.^{lx}

Motivations for public-private collaboration

There are often significantly higher initial costs associated with bringing broadband to rural and isolated communities,

due to low population density, lengthier network requirements and challenging terrain.^{lxi} Building infrastructure for the internet has mostly been left to the private sector, an unusual arrangement compared to other services that require large-scale infrastructure, such as water and electricity, which are overseen by the public sector. And private telecom companies are often unwilling to make large upfront investments to bring broadband to remote communities where the market is small and expected revenue is low.^{lxii} A partnership can address these economic challenges by providing public financing for the deployment costs, as well as removing regulatory barriers. In return, private network service providers bring expertise, resources and innovation in network operations and customer service.^{lxiii}

Impact of broadband partnerships

Since 2010, BTOP grantees have deployed more than 113,000 miles of fiber across the country, connecting or upgrading 25,300 community anchor institutions in the process.^{lxiv} An analysis of BTOP published in 2014 found that grant communities experienced an estimated 2 percent greater growth in broadband availability than non-grant communities, which generated increased annual economic activity estimated to be between \$5.17 billion and \$21 billion, and more than 4.3 million people across the United States gained broadband availability.^{lxv} Overall, the percentage of rural Americans without broadband access fell to 17% by the end of 2019 and the digital divide between urban and rural America shrunk by nearly two-thirds.^{lxvi}

However, BTOP primarily offered one-time grants that only covered initial deployment costs and some communities found that without continued public funding, private companies lacked incentive to continue developing and offering services to rural areas. These communities have had to find additional federal, state and local funding to pick up where BTOP left off.^{lxvii} In May 2022, President Biden announced the “Internet for All” Initiative, which will provide \$65 billion in funding for further broadband expansion to underserved communities, with a continued emphasis on collaboration between states, localities, the private sector and nonprofits.^{lxviii}

US Climate Action Partnership

Alignment of business and environmental groups

The US Climate Action Partnership (USCAP) was a collaboration that included some twenty large companies and five environmental organizations, which convened in 2007 to call for federal government action on climate change.^{lxix} Corporate members included manufacturers such as Dow and GE, energy companies such as NRG and PG&E, mining companies such as Alcoa and Rio Tinto, and others. Environmental members included World Resources Institute, The Nature Conservancy, and others.^{lxx}

USCAP did not have any staff of its own, but rather was coordinated primarily by three DC-based groups: an NGO called The Meridian Institute, a consultancy/lobbyist group called Lighthouse Consulting, and a communications firm called Powell Tate.^{lxxi}

In 2007, USCAP developed a proposal for legislative action on climate change, which addressed their proposal for reducing greenhouse gas emissions, and their intention to work with Congress and other stakeholders to advocate for their position.^{lxxii} Their plan called for a mandatory limit to greenhouse gas reductions, with market-based approaches for reducing carbon, and encouragement of action by other countries.^{lxxiii}

Explanation for the involvement of business

There are many explanations for why such a powerful group of corporations chose to sit down with environmental groups to craft a proposal for addressing climate change. The group's explanation was that it would create economic opportunities for the country: "In our view, the climate change challenge, like other challenges our country has confronted in the past, will create more economic opportunities than risks for the U.S. economy."^{lxxiv}

Others contended that this was just a strategy for these corporations to benefit from potential

legislation that might emerge from Congress. USCAP's proposal centered around a cap-and-trade program (which might be easier to manipulate than a more straightforward carbon tax), and requested that companies that have taken early action (before any laws were enacted) should receive credit for emissions reductions.^{lxxv} The proposal also requested cost-sharing between the public and private sector,^{lxxvi} which could be interpreted as a request for taxpayer subsidies for existing corporate R&D.^{lxxvii}

Still others claimed that the win-win nature of the bill (i.e. a win for both business and society as a whole) was precisely the reason why it would work. Fred Krupp, President of the Environmental Defense Fund, said of the partnership: "With this lineup of companies and environmental groups endorsing it, a carbon cap is clearly the consensus solution to climate change."^{lxxviii} Senator John Warner (R-VA) said, "When I see such an extraordinary cross-section of America's free-enterprise system, together with the environmental groups, come and form a group like this, you've got my attention."^{lxxix}

Legislative action and aftermath

The labors of USCAP were partially vindicated in 2009, when the Waxman-Markey bill (HR 2454), which featured a national cap-and-trade system, passed the US House of Representatives.^{lxxx} However, despite considerable effort, the bill didn't get through the Senate. This disappointment, along with several subsequent corporate departures from the group, led many to proclaim that USCAP had failed: "When the climate bill featuring this policy failed to pass through Congress... USCAP became quasi-defunct."^{lxxxi}

After the breakdown of Waxman-Markey, many speculated on the reasons for the failure. Explanations ranged from allegations that environmental groups had lost touch with their base of support,^{lxxxii} to lobbying by the coal industry, to the lack of support from the White House.^{lxxxiv}

Some suggested that the entire USCAP effort was a ruse; that the same companies that publicly supported climate action were in fact privately lobbying against it.^{booxv} If it is true that USCAP members privately undermined the effort, then several possible lessons can be drawn. The first is that perhaps the entire effort was doomed from the start. If even some of the most publicly committed corporations were not actually in favor of the cap-and-trade proposal, then future action on this issue is unlikely to come from any collaboration involving business. If lobbying did surreptitiously take place, it is also possible that there was legitimate support for the proposal from many individuals

involved in USCAP, but there was not sufficient organizational alignment within the corporations.

One final possibility is that USCAP legitimately wanted the cap-and-trade bill to pass, but that it was simply defeated. While USCAP is now defunct, the lessons learned inform current efforts of companies and environmental groups to influence climate policy, including the CEO Climate Dialogue. So if the final explanation is true – that USCAP legitimately wanted federal climate change legislation – then perhaps this second round of efforts will succeed. Only time will tell.



COVID-19 and Operation Warp Speed

The race for a vaccine

The first known case of COVID-19 was identified in Wuhan, China, in December 2019 and quickly spread worldwide. By early 2020, as the pandemic shut down businesses and schools and overwhelmed healthcare systems, global health authorities and governments realized that rapid vaccine development would be crucial to ending the public health crisis and that public involvement could play a valuable role in deploying vaccines at scale to ensure equitable and widespread availability.

In May 2020, the Trump administration announced Operation Warp Speed (OWS), a public-private partnership to accelerate the development, manufacturing, and distribution of COVID-19 vaccines and therapies, with a goal of administering 300 million vaccine doses by January 2021. The program, initially funded with about \$10 billion from the CARES (Coronavirus Aid, Relief, and Economic Security) Act, coordinated the efforts of federal agencies, including the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the National Institutes of Health (NIH) and the Department of Defense, with private firms.^{lxvii}

Eight pharmaceutical and biotechnology companies were selected to receive funding for research and development of COVID-19 vaccines, using a variety of different vaccine technologies, including mRNA.^{lxviii} Other companies were included in the program through advanced purchasing contracts for vaccines not directly funded by OWS (including Pfizer) and the manufacture of ancillary supplies such as needles and syringes.^{lxviii} In December 2020, eleven months after the SARS-CoV-2 virus strain was first isolated, the Pfizer and Moderna vaccines both received emergency use authorization from the FDA, an unprecedented turnaround time for vaccine development.

The case for public-private collaboration

The pharmaceutical companies had more information than the federal government about the development of

vaccines, having already worked on developing vaccines for previous coronaviruses, including SARS and MERS. However, the injection of funds from OWS allowed them to accelerate the timeline for R&D and testing at a rate not previously achieved. The federal government also removed regulatory barriers in the testing and approval process and granted emergency use authorizations to three vaccines before full FDA approval, further shortening the road to public distribution.^{lxix}

Another key element of OWS was to ramp up the manufacturing capacity for vaccine candidates during the testing stage, rather than waiting to scale up after testing and approval were complete, in order to more quickly meet distribution targets. This was a huge financial risk, as considerable funds could be spent on manufacturing vaccines that proved ineffective or failed to receive regulatory approval. By taking on this risk, the federal government allowed the pharmaceutical companies to focus entirely on research, development and testing.^{xc}

Criticisms of Operation Warp Speed

OWS has been criticized for its heavy U.S. focus and for prioritizing deploying the vaccine to Americans at the expense of expanding access to low- and middle-income countries.^{xc} Pharmaceutical companies that were funded by OWS were initially able to retain intellectual property rights and set their own pricing, despite receiving public funds. Requiring licensure to produce the vaccine in other countries could have prevented developing countries from building manufacturing capacity and increased the risk of drawing out the pandemic if much of the world's population remained unvaccinated. Under international pressure, President Biden reversed this position in May 2021.^{xcii}

There were also criticisms that the budget, which eventually ballooned to a reported \$18 billion, pulled funds from other agencies that were earmarked for COVID-related public-health programs, including providing PPE, medical equipment and testing supplies to healthcare professionals.^{xciii}

OWS also suffered from lack of transparency and conflict of interest. Foremost among them was that Dr. Moncef Slaoui, chief advisor for OWS, was previously a member of the board of directors for Moderna, a company with no FDA approved and marketed products prior to receiving OWS funding. He and three other members of the leadership team also held stocks for Moderna, Pfizer and other pharmaceutical companies involved in OWS. Lack of transparency in the decision-making process led to less accountability and helped fuel vaccine-related conspiracy theories and vaccine hesitancy.^{xciv}

COVAX and multistakeholder vaccine development

In April 2020, the Access to COVID-19 Tools Accelerator, a multistakeholder initiative co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, the Vaccine Alliance, and the World Health Organization (WHO), was announced with the goal of accelerating development and ensuring globally equitable access to COVID-19 technologies. COVAX, the initiative's vaccine development pillar, received funding from public, private, philanthropic, and civil society organizations for accelerated research and clinical testing of nine vaccine candidates.^{xcv} Due to the U.S.'s withdrawal from WHO under the Trump

administration, OWS was not initially involved in funding or working with COVAX, although some vaccine candidates received funding from both programs.

Like OWS, COVAX provided funding for vaccine development to some private entities and invested upfront in manufacturing but in contrast to OWS, COVAX funding carried requirements to ensure global access and affordable cost.^{xcvi} Oxford University, which received support from COVAX, licensed its vaccine technology to AstraZeneca on a royalty-free basis and AstraZeneca in turn licensed the vaccine to CEPI at no profit.^{xcvii} The multi-national structure of COVAX and the blended sources of funding meant that no single country's needs would be prioritized and that the initiative would focus on equitable distribution to the benefit of everyone.

Both OWS and COVAX ultimately succeeded in producing vaccines faster than any other novel vaccine had been developed previously. Despite its shortcomings, OWS had an overall positive effect of providing both funding and regulatory support for vaccine development. However, the success of COVAX in distributing vaccines more equitable to low- and middle-income countries suggests the effectiveness of a more collaborative approach.



4. Discussion of Lessons Learned

Five key lessons can be drawn from the cases presented here. They are explained as follows:

1. Public-private partnerships provide real advantages

It may be obvious, but it bears emphasizing: many of the results discussed in the cases presented here were achieved much more effectively than they could have been without the leadership of the private sector. There are several reasons why business-led PPPs can achieve results that government alone could not.

The first is that businesses have much more detailed **information** about the fields in which they operate than any government could ever obtain. Operation Warp Speed illustrates this particularly well. The pharmaceutical companies had more expert information on vaccine research, development, and testing than the US federal government would have and were therefore better positioned to start work on vaccine development immediately when producing a vaccine in a short timeframe was crucial to slowing the COVID-19 pandemic.

A second explanation for the success of business-led partnerships is that business's involvement tends to confer **legitimacy** to the venture. In the case of the Sustainable Apparel Coalition, this took the form of legitimacy to the members of industry themselves. Could any group other than one composed of their peers have convinced so many corporations to sign on to develop and use the Higg Index for sustainability reporting? Likewise, in the case of USCAP, Senator John Warner (R-VA)'s quote was very telling: "When I see such an extraordinary cross-section of

America's free-enterprise system, together with the environmental groups, come and form a group like this, you've got my attention."^{xviii}

The result of better information and greater legitimacy, along with the excellent pool of talent in the private sector, is greater **productivity** and **innovation**. The P-TECH collaboration is widely lauded for its innovative model as well as its successful outcome, and a large degree of this success is due to the information and legitimacy that IBM's involvement provided.

The benefits of successful partnerships are fairly self-evident, but it is important to look a bit deeper at some of the specific characteristics that distinguish the cases. The rest of the discussion offers that examination.

2. Funding arrangements can take many forms

The key to understanding any deal is to follow the money, and public-private partnerships are no different. The interesting thing about deals that are aimed at achieving public benefit is that the flow of funding can be much more surprising than in simpler contractual or exchange relationships.

Perhaps the most unique of the six cases discussed here in this regard is the Sustainable Apparel Coalition. The original funding for the project was provided by one of the founding private partners, Walmart, and ongoing funding for the Coalition comes from all participating organizations in the form of dues, with each company paying based on their company's revenue. The money is largely project *funding* --- not just *financing*, and thus, there isn't a reasonable expectation that the project will generate a return for

the companies. That establishes an important point: not all business decisions are rooted in monetary calculations. Corporate philanthropic ventures need not be isolated from the business model; rather, the company can integrate philanthropy with some of its other business decisions. It might be that such a business philosophy is exactly what is needed to jumpstart effective PPPs at a scale necessary to make an impact on pressing issues. Meanwhile, the Higg Index was eventually spun off into a for-profit company, which was deemed necessary for the project to achieve scale, with mixed results.

On the other hand, the chocolate and cocoa industry collaboration is an example of an industry initiative with relatively modest funding. The industry estimate is that the eight companies involved have spent \$75 million on these efforts, including just \$10 million for the PPP with the U.S. Department of Labor.^{xcix} When compared to the approximately \$400 billion in annual revenue that the eight collect, this is a minor investment.^c The result is that they have been able to fairly easily start working on an issue that is of concern to many stakeholder groups, while providing several benefits to themselves, including a more stable supply chain and improved brand value.

On the other hand, the Broadband Technology Opportunities Program was essentially the opposite: government provided the funds, and businesses coordinated the implementation. This funding model sounds similar to a common contract model, but it differs in the diversity of local programs that controlled the pools of funding, as well as in the degree of authority and innovation that were allowed by the government funder.

3. Each partner must have a clear, important role

The P-TECH project is perhaps the best example of a collaboration that defined its goals clearly from the outset. There is in fact no way for any of the three key partners to forget what its role is. The city department of education's role is to oversee the secondary



education aspect of the program. City Tech is involved because it confers the Associate's degrees. And IBM is involved to provide the industry perspective, and to provide internships and jobs for the students. Indeed, the P-TECH project also excelled at defining the roles of the partners at a more detailed level. In the guide for other institutions based on their experience, they wrote: "Many of the most successful corporate-school partnerships are designed as collaborations where there are clear expectations of each partner's commitment and obligations...for example, corporations need a clear understanding of what types of resources—internships, mentors, summer jobs—are needed from them, and for how long."^{ci}

USCAP, on the other hand, was a collaboration with several dozen members, which inherently made the division of roles more difficult. As it happens, the membership shifted quite a bit throughout the organization's history, which indicates that each member was not considered *essential* for the partnership.

The Sustainable Apparel Coalition is also a membership organization but seems to have had a more successful time keeping its members engaged. While SAC also faced the issue that some partners were certainly more important for success than others (Blu Skye as facilitator, Patagonia and Walmart as organizers, Nike as leader in index development), they were able to keep members involved by rotating meetings through the members' offices and generally building a collaborative culture.

4. Build success through incremental goals

When structuring a project, it is essential to establish a rigorous performance measuring and monitoring program, so that it is possible to determine if the project is successful. However, when comparing the effectiveness of very different types of initiatives, subjective measures of success are often the only option. For better or worse, the public's perception of success is subjective too. And because success begets more success (as the case of P-TECH demonstrated), it is essential to be seen as successful throughout the partnership process.

This is illustrated in the comparison between the Sustainable Apparel Coalition and USCAP. By most media accounts, SAC has been quite successful, and USCAP has been a failure. Truthfully, this is an unfair comparison, as SAC's primary stated near-term goal was to build a *voluntary industry* reporting standard, while USCAP aimed to establish the first-ever *mandatory national* climate change legislation in the US. But that is the common perception nonetheless.

Of course, the most important factor it is not just the *perception* of success, but rather *achieving* the maximum that the partnership is able to. Setting discrete goals of varying degrees of difficulty is a way to build success. The chocolate consortium, P-TECH, and BTOP all incorporated this feature in their activities in some form.

5. Commitment of partners is essential

The commitment of all partners in a collaboration is perhaps the most essential ingredient of success. Commitment can derive from internal motivation (altruism) or external motivation (incentives). The more powerful of the two is external motivation, and it is fairly clear that the most effective partnerships are structured so that each partner is incentivized to work towards success.

The members of the P-TECH partnership were clearly very committed to the project, and no doubt some of that commitment was rooted in a desire to help the students in the school. But the beauty of the partnership is that external motivating factors ensured that that goal was achieved regardless of the partners' altruistic intentions. Each partner had a strong reason to be involved. The department of education no doubt was very pleased to be receiving so much support in building a new school in its jurisdiction. City Tech was setting itself up to receive a steady supply of qualified new students each year. IBM was building a pipeline of skilled IT workers into its ranks. All of the partners also benefited from the media exposure of such an innovative, successful school.

The members of the Sustainable Apparel Coalition were motivated because many of them had already struggled with building their own reporting structures and had learned how difficult it is to do on one's own.

In the chocolate and cocoa industry example, the national governments of Ghana and Côte d'Ivoire were motivated because they were afraid that they would lose exports if the US ever regulated chocolate that had child labor in its supply chain, and the companies were afraid they would lose customers if the issue continued to gain media attention.

The goal of a partnership is to align incentives correctly, because as long as each partner understands the benefits, then the collective result can be much greater than any individual group could produce. Philanthropy is not as sustainable a model as mutually beneficial collaboration, because the commitment in philanthropy lasts only as long as the altruistic motivation holds. The miraculous result of public-private partnerships is that, if they are well structured, they can align diverse motivations to achieve an incredible positive benefit for society

Appendix A: Key Organizations

The following are some of the most important organizations working to promote business engagement in public-private partnerships. These specific organizations were chosen because of their apparent influence in the field, volume of activity, and/or relevance of informational resources.

- **Business Call to Action** seeks to accelerate progress toward the achievement of the Sustainable Development Goals by recognizing and advancing inclusive businesses with a clear commitment to benefiting people in low- and middle-income markets.
- **Business for Development** is an Australian-based NGO that encourages and facilitates core business activities that contribute to the Sustainable Development Goals. Business for Development helps their partners to build commercially viable, scalable business enterprises focused on poverty reduction.
- The **Canadian Council for Public-Private Partnerships** (CCPPP) is a national not-for-profit member-based organization (with more than 380 members) with representation from across the public and private sectors. Its mission is to promote innovative approaches to infrastructure development and service delivery through public-private partnerships with all levels of government. It works on issues of infrastructure investment, legislation, procurement, labor, and public opinion. The CCPPP offers the [Canadian Council National Awards for Innovation and Excellence in Public-Private Partnerships](#) to honor exceptional public-private partnerships.
- **DeveloPPP** is a program of the German Federal Ministry for Economic Cooperation and Development (BMZ) to partner with the private sector on sustainable development projects. More than 2,500 successful development partnerships have been made in more than 70 developing countries since 1999.
- **The Donor Committee for Enterprise Development** (DCED) focuses on the role of the private sector in international development. Their website documents the [successes and lessons learned](#) from “Private Sector Development” (PSD) programs to create economic opportunities at scale in developing countries. The organization has developed The [DCED Standard](#), a framework to help practitioners monitor indicators of success and learn/adapt based on the information received. DCED’s [Private Sector Engagement page](#) contains a lot of information relevant to the issues covered in this report, including publications and practical tools for those involved in “inclusive business.”
- The U.S. Department of Transportation’s **Federal Highway Administration** (FHWA) has a good portal for PPPs. Their resources section includes very practical documents for establishing and running a PPP.
- The **Inclusive Business Action Network** (iBAN) is a global initiative that supports the development of scalable inclusive business models. Its knowledge hub offers tools and training including webinars and online courses, as well as a space to connect with other practitioners to share knowledge and access best practices. The initiative also maintains an [Investor & Technical Assistance Database](#) that lists organizations and initiatives providing financial

and technical support. The focus of iBAN is broadly on inclusive business (rather than specifically on *partnerships*), but it is a relevant resource nonetheless in terms of business taking a leading role in addressing societal problems that are normally the focus of PPPs.

- The **Institute for Public-Private Partnerships** (IP3), established in 1994, is an advisor and provider of training to governments, financial institutions, and public service providers, with the goal of assisting them in building enabling environments for PPPs in infrastructure.
- The **International Labour Organization** (ILO) works with companies and foundations to tackle global labor market issues; to support sustainable enterprises and entrepreneurs; to enhance value in supply chains; to promote social protection; and to resolve specific problems in the world of work. Their website features a long list of public-private partnerships in which they are involved and factsheets on previous projects.
- The **Office of Global Partnerships**, run by the U.S. Department of State, serves as the platform for collaboration among the State Department, public and private sector organizations, and civil society. It brings people together, serves as a catalyst to launch new projects, implements projects, and cultivates ideas by providing resources to partners.
- **The Partnering Initiative** (TPI) works to encourage collaborations between civil society, governments, and companies to build a sustainable future. It provides organizational development services and works at the system level to create platforms to support partnerships.
- **PROPARCO** is a development financial institution partly held by the French Development Agency (*Agence Française de Développement*). Its mission is to be a catalyst for private investment in developing countries that targets growth, sustainable development, and reaching the Sustainable Development Goals.
- **Swedish International Development Cooperation Agency** (Sida) is a government organization working towards global development and reducing poverty, which administers approximately half of Sweden's budget for development aid. It has significant collaboration with the private sector.
- **The United Nations Economic Commission for Europe (UNECE) - International PPP Centre of Excellence** (ICoE) was created in 2009 and builds off UNECE's 15 years of experience working on public-private partnerships. The goal of ICoE is to produce international standards to guide governments on the procedures, processes, and models of implementing PPPs (see their List of PPP Standards). In order to help governments implement PPPs, ICoE is establishing regional hubs to assist countries to adapt standards to local conditions.
- **The United Nations Industrial Development Organization (UNIDO) – Business Partnership Programme** engages with business to build local productive capacity, enhance social inclusion, and promote environmental sustainability.
- **U.S. Agency for International Development (USAID) – Global Development Alliances Program** encourages partnerships between USAID and the private sector to identify and implement market-based solutions to development challenges.
- **The World Bank Public-Private Partnership Legal Resource Center** is a resource hub for government officials, project managers and lawyers involved in establishing PPP projects in developing countries. Building on international experience and precedents, the World Bank offers toolkits, case studies, legal frameworks, sample contracts and legislation, and other guides for developing a legal enabling environment for PPPs. The World Bank also supports the **Public-Private Infrastructure Advisory Facility**, which helps developing countries strengthen policies, regulations, and institutions around private-sector participation, and **CP3P**, a professional PPP certification program.

Appendix B: Review of Relevant Literature

This section provides a review of some of the relevant literature on public-private partnerships. There is a large body of literature about PPPs, but very little has been written specifically about the type of PPP covered in this report (business-led partnerships to achieve public benefit). Thus, information on the issues must be drawn from the broader PPP literature.

Understanding the nature of PPPs

A good place to begin one's study of the nature of PPPs is with *Collaborative Governance: Private Roles for Public Goals in Turbulent Times*, by **Donahue and Zeckhauser (2011)**.^{cii} The book covers all of the important topics about PPPs – reasons why they are less common than they could be, important examples, benefits of collaboration, etc. – and does so with considerable insight. See pages 5-8 for a thorough review of the significant academic work in various disciplines on public-private collaboration.

Of the literature focused on understanding the nature of PPPs, several articles delve into defining the *role structures* in PPPs. “Toward an Understanding of Types of Public-Private Cooperation,” by **Schaeffer and Loveridge (2002)**, categorizes the relationships between parties in PPPs into four types: leader-follower relationships, exchange relationships, joint ventures, and full partnerships.^{ciii} “Pinning Down the Moving Target: The Nature of Public-Private Relationships,” by **Macdonald (2012)**, presents a model for understanding the relationships in a PPP.^{civ} “Putting the NP in PPP: The Role of Nonprofit Organizations in Public-Private Partnerships,” by **Mendel and Brudney (2012)**, contends that successful PPPs between public institutions and business are often mediated by NGOs.^{cv} “Public-Private

Partnerships: Balancing Financial Returns, Risks, and Roles of the Partners,” by **Beck and Patterson (2005)**, examines the interrelation among financial returns, financial risk, and roles of the partners, and advocate for a balanced model of structuring PPPs.^{cvi}

Other studies are more focused on the *economics* or underlying *models* of collaborations. “The Economics of Public-Private Partnerships,” by **De Bettignies and Ross (2004)**, reviews the economics of PPPs in order to understand the costs and benefits involved, developing a set of conditions under which PPPs are a beneficial option.^{cvii} “The Evolution of Cooperation,” by **Axelrod and Hamilton (1981)**, presents a model for cooperation based on reciprocity.^{cviii} “Public-Private Partnership Networks: Exploring Business-Government Relationships in United Kingdom Transportation Projects,” by **Siemiatycki (2011)**, weighs the costs and benefits of repeat collaborations between public and private actors in the UK transportation sector, finding that repeat collaborations lower transaction costs and encourage innovation, but reduce competition and increase delivery costs.^{cix} “Comparing Public-Private Partnerships and Traditional Public Procurement: Efficiency vs. Flexibility,” by **Ross and Yan (2015)**, considers the benefits of PPPs versus traditional public procurement, finding that it can be a tradeoff between maximizing value for money and maximizing total social surplus.^{cx}

Still others look more specifically at the nature of the *contracts* in PPPs. “Beyond the Contract: The Scope and Nature of Informal Government-Nonprofit Partnerships,” by **Gazley (2008)**, discusses a study of service delivery partnerships in the state of Georgia, finding that only half of the PPPs studied involving NGOs and governments are formalized through the

use of contracts.^{cxix} “Public-Private Partnerships: An International Performance Review,” by **Hodge and Greve (2007)**, analyzes the results of long-term infrastructure contracts, and argue that there is contradictory evidence regarding their effectiveness.^{cxix} “Performance of Public-Private Partnerships and the Influence of Contractual Arrangements,” by **Wang and Zhao (2018)**, examines how contractual arrangements affect PPP performance, finding that they had an impact on private partner selection, financial arrangements, role division, risk allocation, and project characteristics.^{cxviii}

Specific categories of PPPs

There is a long list of combinations of partners that can make up a PPP, including corporations, universities, NGOs, and multilateral institutions. The articles in this section provide some insight into these different types of PPPs.

Both “Promoting Better Public-Private Partnerships: Industry-University Relations,” by **BIAC (2003)**,^{cxiv} and “The Role of the University in Public-Private Partnerships,” by **Kysiak (1986)**,^{cxv} discuss the role of university-industry collaborations in promoting innovation and increasing knowledge. “United Nations-Business Partnerships: Good Intentions and Contradictory Agendas,” by **Utting and Zammit (2009)**, looks at PPPs between UN entities and multinational corporations. They contend that much of the scholarship on PPPs focuses on the positive benefits in terms of improved governance rather than the cementing of corporate interests in public policy.^{cxvi} “The Case of Business Improvement Districts: Special District Public-Private Cooperation in Community Revitalization,” by **Grossman (2008)**, discusses business improvement districts (BIDs), which are formal partnerships between public, private, and civic actors to improve community and economic development in city areas. He discusses how BIDs seem to exist in a blurry area between the public and private sectors, acting like private entities in some ways and public entities in others.^{cxvii} “Public-Private Partnerships in Urban Infrastructures: Reconciling Private Sector Participation and Sustainability,” by **Koppenjan and Enserink (2009)**, offers a literature review of urban infrastructure PPPs.

They find that governments understand that private parties can provide public benefit by using resources effectively and introducing innovative technologies; however, governments can go too far in providing incentives for investment, leading to the creation of monopolies. “Public-Private Partnerships in the Health Care Sector: A systematic review of the literature,” by **Torchia et al (2015)**, looks at the use of PPPs in the health care sector.^{cxix} Both “Engaging the Public and the Private in Global Sustainability Governance,” by **Abbott (2012)**,^{cxix} and “Beyond the Public and Private Divide: Remapping Transnational Climate Governance in the 21st Century,” by **Pattberg and Stripple (2008)**,^{cxix} focus on the role of non-state actors in global climate change governance. “Understanding of Public-Private Partnership Stakeholders as a Condition of Sustainable Development,” by **Wojewnik-Filipkowska and Węgrzyn (2019)**, considers the role of PPPs in sustainable development.^{cxix}

Making PPPs more functional

Other academic studies focus more on the practical side of PPPs: how to build, sustain, and improve them.

“Public-Private Partnerships: Balancing Financial Returns, Risks, and Roles of the Partners,” by **Becker and Patterson (2005)**, discusses the appropriate allocation of risks and returns in various types of PPPs. “Donor Partnerships with Business for Private Sector Development: What Can We Learn from Experience?,” by **Heinrich (2013)**, provides a framework for measuring and monitoring progress in partnerships. “Role Distribution in Public-Private Partnerships: The Case of Heritage Management in Italy,” by **Dubini, Leone, and Forti (2012)**, emphasizes the importance of mutual trust, as well as a clear definition of responsibilities, resource allocations, etc.^{cxvii} “The Transformation of Governance: Public Administration for Twenty-First Century America,” by **Kettl (2002)**, presents ten principles for the construction of a new type of public service.^{cxvii} “Measuring the Performance of Public-Private Partnerships: A Systematic Method for Distinguishing Outputs from Outcomes,” by **Koontz and Thomas (2012)**, reviews usage of the Performance Assessment Rating Tool (PART) – developed by the US Office of Management and Budget – in order to

develop a system of classifying outputs/outcomes for various types of programs.^{cxxvii} “Moving Forward on Public Private Partnerships: U.S. and International Experience with PPP Units,” by **Istrate and Puentes (2011)**, discusses the justification for creation of specialized entities, called PPP units, in many states and countries to serve various functions in PPPs (e.g. quality control or technical advice).^{cxxviii} “Creating Partnership Synergy: The Critical Role of Community Stakeholders,” by **Lasker and Weiss (2003)**, points out that the ways in which community stakeholders are involved has a large impact on a partnership.^{cxxix} “Working Better Together: How Government, Business, and Nonprofit Organizations Can Achieve Public Purposes Through Cross-Sector Collaboration,

Alliances, and Partnerships,” by **Fosler (2001)**, presents the various capacities that parties must possess to build a successful partnership, including leadership, citizenship, communication, and others.^{cxxx} “Public-Private Partnerships and the Public Accountability Question,” by **Forrer et al (2010)**, considers the question of public accountability and proposes an analytical framework based on risk, costs and benefits, political and social impacts, expertise, collaboration, and performance measurement.^{cxxxi} “Implementing systems thinking to manage risk in public private partnership projects,” by **Loosemore and Cheung (2015)**, proposes that moving to a systems-thinking approach can be useful in managing risks associated with PPPs.^{cxxxii}

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