

Compact Container Systems

*Innovative, Secure, and Environmentally Beneficial
Solutions to Supply Chain Inefficiencies*

Collapsible Container Presentation to the
Intermodal Europe 2024

By

Charlie Santos-Buch

Chief Executive Officer



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Who We Are – Compact Container Systems

- Compact Container Systems was founded in 2009.
- Dedicated transportation and logistics executives helping to solve problems with the intermodal industry.
- Developed a revolutionizing product to improve back-haul empty container fleet management.
- Created the world's first 5:1 foldable containers, the **SeaFold 40'** and **SeaFold 20'**.
- ISO, UIC and CCS certified.
- Easy to operate and safe to use.
- Improves operating efficiencies at Ports, Terminals, and Depots.
- Reduction of container repositioning and maximizes storage.
- Significant cost reduction benefits throughout the freight market supply chain.
- Important sustainability dynamics using our “Green” container.
- Supports the improvement of security measures throughout the supply chain.



Compact Container Systems History and Milestones

2009 – 2013

- Initial foldable 4:1 prototype container is certified by Lloyd's Register in July 2013.

2014 – 2016

- Charlie Santos-Buch was named Chairman and CEO of CCS in 2014.
- Norman Kendal (Director of Engineering) and John O'Brien (Director of Maintenance) join in 2015.
- Redesign of foldable container to a 5:1 format is created and developed.

2016 – 2019

- Dedicated third-party engineering firm hired to support evolution of technology.
- First generation 5:1 container is certified by Lloyd's Register in September 2019.

2019 – 2023

- COVID-19 Pandemic shuts down global production.
- Shortage of containers creates a challenging freight market.
- Next generation container is certified by Bureau Veritas in April 2022.
- CCS executive and operation team continues to expand.

2023 – current

- Container is rebranded as the **SeaFold 40'**.
- Sustainability model is proven.
- CCS officially announces 5:1 SeaFold technology at *Intermodal Europe 2023 in Amsterdam*.
- CCS officially announces 5:1 SeaFold technology at *Intermodal Asia 2024 in Shanghai*.
- Next generation container improves design to reduce weight and operating efficiencies, pending certification.
- CCS is finalizing a 20' 5:1 foldable container design and moving to production in early 2025.



Our Team: Developing Critical Mass Through Industry Experts



Charlie Santos-Buch
*Chairman &
Chief Executive Officer*



Elmer Laydon, CPA
*Chief Financial Officer &
Chief Operating Officer*



Colin D. Rowe, Esq.
*VP, Business Development &
Corporate Counsel*



Norman Kendall
Director of Engineering



John O'Brien
Director of Maintenance



Thomas Reid
Global Technical Director



Ian Routledge
Strategic Consultant



Roeland Reinders
Strategic Consultant



Robbie Burns
Strategic Consultant



John G. Larkin
Executive Advisor

Unprecedented Times in the Intermodal Supply Chain

Compact Container Systems (“CCS”) is a proud member of the Transported Asset Protection Association (“TAPA”), a worldwide leader in identifying and providing awareness of supply chain risks and organizing partnerships to promote supply chain security

The Intermodal Industry globally is experiencing elevated supply chain pressure due to many factors:

- **Conflicts in the Red Sea, Middle East and Ukraine** → Alternative routes moving freight round the conflict zones including the Red Sea and rerouting around Africa causing delays and increasing costs.
- **Gaps in Communication** → The **SeaFold 40'** is compatible with various container tracking technologies, allowing for real-time tracking worldwide.
- **Port/Terminal/Depot Congestion** → **SeaFold 40'**s 5:1 design alleviates congestion and liberates valuable storage space at ports, terminals, and depots.
- **Contraband/Stowaways** → Empty conventional containers allow for unwanted contraband and stowaways. **SeaFold** containers helps eliminate that risk.
- **Increased Freight and Shipping Costs** → **SeaFold 40'** reduces time in port, accelerates container transshipment and throughput, assists container space allocation, and reduces carbon emissions across all aspects of intermodal transportation.
- **Increased Fuel Costs** → Simplify loading and unloading processes, presenting an opportunity for time savings and choices regarding vessel speeds, which could reduce emissions and fuel costs.
- **Environmental Security Associated with Carbon Emissions Concerns** → Significant carbon reductions across all aspects of intermodal transport when compared to conventional 40' high cube shipping containers.

Value Proposition: The Next Evolution of Shipping Containers

PROBLEM:

- Management of empty container fleets has a significant cost.
- More than 20% of all ISO containers return empty to origination point.
- Unbalanced trade routes.
- Storage limitations in ports, terminals and depots around the world today.
- Port, terminal and depot congestion.
- Unprecedented security risk challenges.
- Increased international pressure to reduce CO2 emissions.

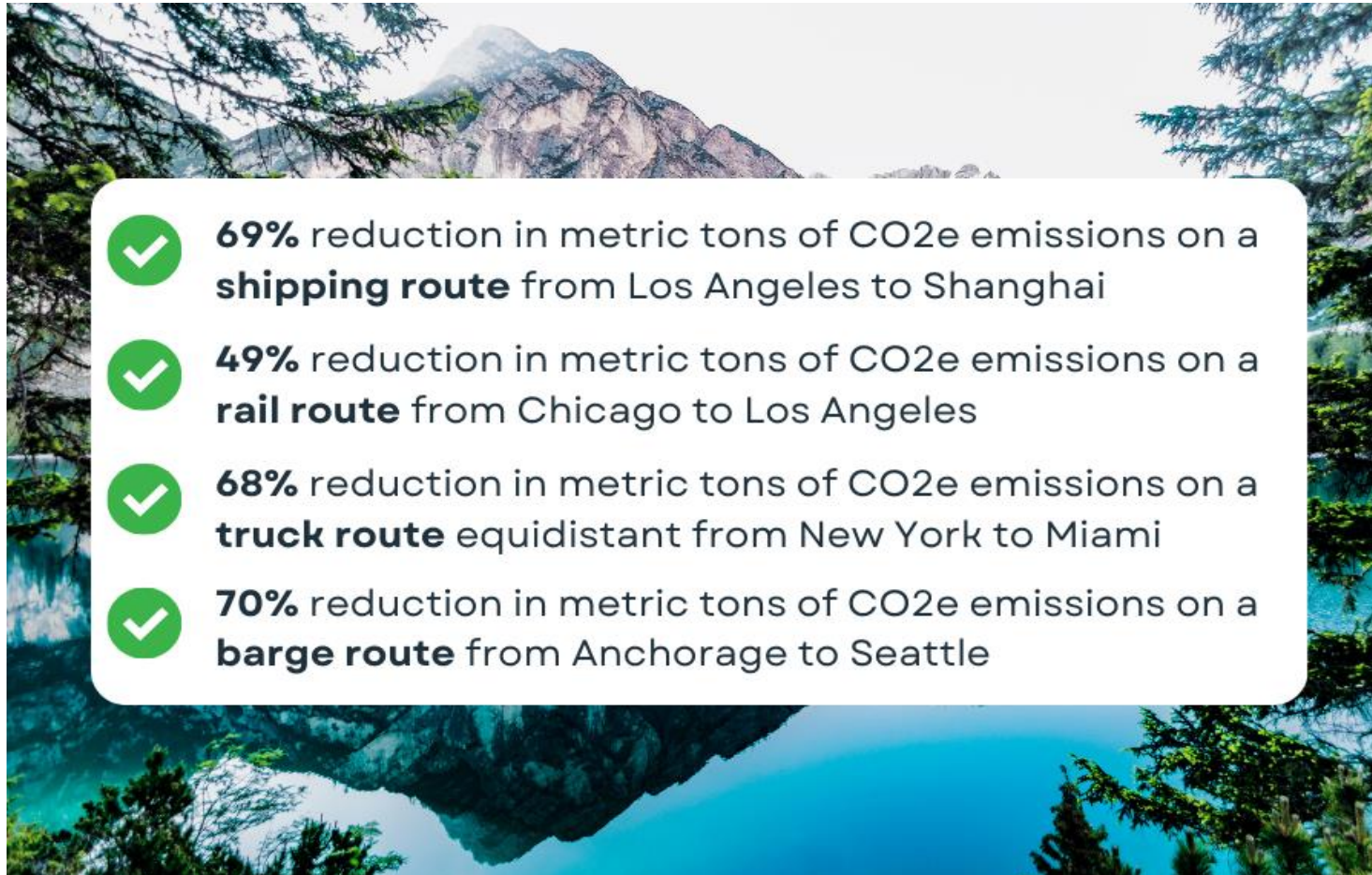
SOLUTION:

- The **SeaFold** 5-in-1 family of foldable containers.
- Five (5) folded containers take up one (1) 40' HC standard container slot.
- Creates operating efficiencies on the ship, port and depot.
- 80% more storage space on the ship, port and depot.
- Excess space can be used for other revenue generating business.
- Reduced repositioning movements on the ship, port and depot.
- Significant cost savings achieved with less repositioning and container movements.
- Quantifiable CO2 emission reduction.
- Folded containers minimize accessibility for contraband.



The GreenBox: SeaFold 40' Environmental Benefits

- Significant green house gas emission reduction opportunities.
- Unbalanced, closed-loop routes that return to the origination port offer the largest environmental benefits.
- Dramatic carbon reduction impact using ship, rail, truck and barge modes of transport.
- Analysis performed by a third-party ESG analytics firm have identified the following reductions in metric tons of CO2 equivalent (CO2e) emissions:



SeaFold 40' Use Cases vs Conventional 40' HC Containers

On Mainline and Feeder Vessels:

- Provides significant cost savings for one-way, closed loop cargo shipments.
- More efficient ship loading and unloading.
- Creates additional stowage space.
- Reduces vessel time in port.
- Reduces repositioning moves.
- Reduces the number of cycles when lifting bundled units.
- Less time spent in port means less fuel and emissions required to meet shipment deadlines.

At Terminal:

- Alleviates congestion.
- Alleviates future container shortages or surpluses.
- Liberates valuable storage space.
- Streamlines empty container repositioning.
- Fewer lifts and faster throughput of containers.

Inland Transportation:

- Reduces empty container repositioning.
- Improves rail and truck terminal storage
- Fewer trucks and rail cars delivering empty containers equates to less fuel and lower emissions



SeaFold 40' Technology Overview

- Quickly and safely folded or erected in minutes with limited labor and mechanical resources.
- Compatible with all standard handling equipment that exist at most major ports, terminals and depots around the world.
- Built-in semi automatic twist locks allows for seamless safe interconnection of folded containers when stacked as a flat pack.
- Built in accordance with all provisions of the ISO 1496-1-2013 and 668 certification standards.
 - Including International Convention for Safe Containers, International Union of Railways.
 - Lloyd's Register and Bureau Veritas certified.
- Highest quality industry standard materials.
 - Corrosion resistant Corten A steel.
 - High-quality marine grade paint system.
 - Built to withstand harsh maritime environments.
 - Projected life equal or better to a standard HC container.
- **SeaFold 40'** has the same features as a conventional 40' HC container.
- Safe and easy folding and erecting procedure
- Serviceable by existing maintenance organizations and depots throughout the world.
- Majority of aftermarket component parts are easily available from listing services
- Special components parts are on consignment and available from list services
- Patent and trademark protection globally.
- **SeaFold 20'** technology in final stages of being developed today.



SeaFold 40' Dimensions

- Dimensions of five (5) **SeaFold 40'** containers collapsed and bundled = one (1) conventional 40 ft HC container
- Weight of 5 x **SeaFold 40'** collapsed and bundled containers = 65,000 lbs. (29,545 kg)
- Matches the maximum gross weight capacity of one conventional 40' HC fully laden container = 67,200 lbs. (30,480 kg)
- Can fit the same number of standard pallets – 21 – as a conventional 40' HC container

Classification		Dimension (metric)	Dimension (Imperial)	Standard 40' HC
External	Length	12,192 mm	40 ft	12,129 mm / 40'
	Width	2,438 mm	8 ft	2,438 mm / 8'
	Height	2,896 mm	9.5 ft	2,896 mm / 9'6"
Internal	Length	11,892 mm	39 ft	12,022 mm / 39' 3.25"
	Width	2,322 mm	7.62 ft	2,352 mm / 7' 8.5"
	Height	2,672 mm*	8.77 ft*	2,700 mm / 8'10"
Door Opening	Width	2,232 mm	7.32 ft	2,330 mm / 7'8"
	Height	2,500 mm	8.2 ft	2,588 mm / 8'5"
Internal Cubic Capacity		73 cu m	2,578 cu ft	76.4 Cu m / 2,697 cu ft
Max Gross Weight		30,480 kg	67,200 lbs.	30,480 kg / 67,200 lbs.
Target Tare Weight		5,896 kg	13,000 lbs.	4,150 kg / 9,150 lbs.
Maximum Payload		24,584 kg	54,200 lbs.	26,330 kg / 58,050 lbs.
Stacking @ 1.8 G		213,360 kg	470,378 lbs.	216,000 kg/134,480 lbs.
Racking Test		150 Kn	33,721 lbs.	150 Kn/33721 lbs.

* 2,692 mm / 8.83 ft at door end

SeaFold 40' Economic Benefits

SeaFold Creates significant cost savings which increases bottom line profitability

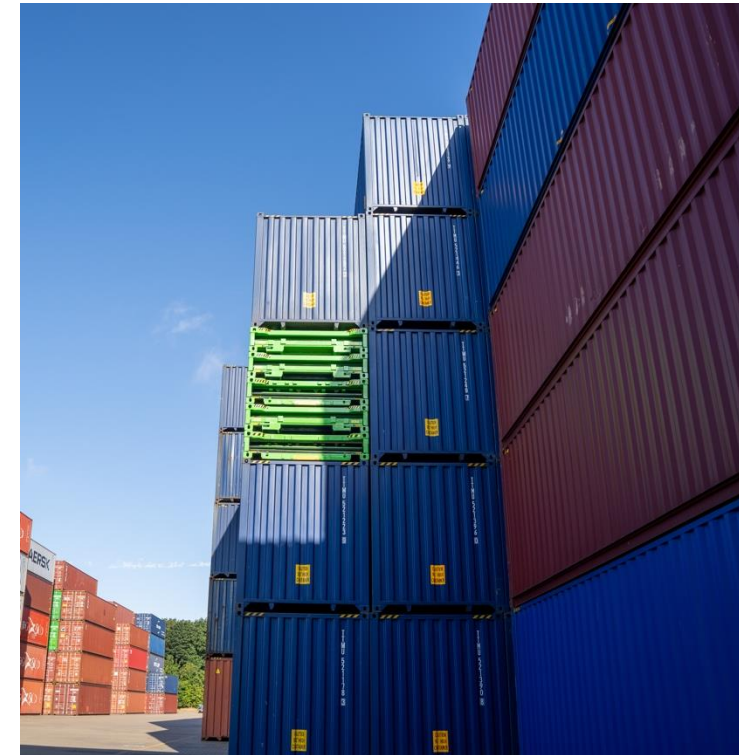
Operational efficiencies of **SeaFold** containers include:

- Five (5) collapsed and interlocked **SeaFold** containers can be stored in the same slot as one (1) conventional 40 ft HC.
- Up to 56% reduction in repositioning costs and empty container movements by truck, barge, rail or sea.
- Up to 80% more storage and operating efficiencies allowing for significant storage savings and space maximization in locations with limited real estate such as ports, terminals, and depots.
- Maximized space allocation creates additional space for other revenue generating opportunities.

Capital investment recaptured in as little as 2.5 to 3 years depending on cost assumptions and number of turns container makes each year.

Illustrative savings based on empty return trip – Chicago to Shanghai

- Savings per trip \$4,600 per bundled 5-pack.
- Savings per year \$18,400 per bundled 5-pack
- Savings over projected useful life \$276,000 per bundled 5-pack



Summary Benefits of the Seafold 40' Foldable Container

- Significant supply chain cost benefits.
- Creates meaningful operating efficiencies at ports, terminals and depots.
- Maximizes storage capacity.
- Reduction of container movements and repositioning.
- Part of the solution for congestion at the port, terminal, and depot.
- Adaptable to all modes of transportation.
- Container operation is compatible with existing handling equipment at most ports, terminals, and depots – **No special equipment is needed.**
- Safe, secure, and easy to operate.
- Meaningful impact to carbon reduction management – EU mandates.
- Pushing adoption and supply chain acceptance today.

CCS Proprietary Information

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