

# AMERICAS TRADES

## South America Scrap-Tire Supply Market Survey

*Sourcing 1,000,000 metric tons of certified scrap tires over 12 months*

Countries covered: Chile · Brazil · Peru · Argentina · Colombia · Ecuador · Bolivia

Prepared April 2026 · Americans Trades · Scrap Tire Disposal Division

## Executive Summary

Americans Trades holds permits to dispose of end-of-life (ELT) and off-the-road (OTR) scrap tires and has set a target of sourcing 1,000,000 metric tons of supply over a 12-month horizon. South America, with its concentration of world-class copper, iron-ore, coal, nickel, gold, and lithium operations, combined with an expanding regulatory push toward Extended Producer Responsibility (EPR) and circular-tire economics, is the strongest single-continent sourcing opportunity for this volume.

This report ranks Chile, Brazil and Peru as Tier-1 markets; Colombia and Ecuador as Tier-2; Argentina as a strategic growth market; and Bolivia as a small but greenfield opportunity. Across all seven countries we estimate directionally about 1.15-1.30 Mt/year of recurring scrap-tire generation, plus a one-time stockpile of roughly 500 kt in northern Chile that is actively being drawn down under Chile's Ley REP tire decree.

### Headline findings

- **Target is achievable only with a multi-stream strategy.** Mining OTR alone is ~150-175 kt/year across the region. To reach 1,000,000 tons in 12 months, Americans Trades must combine (a) mining OTR from haul-truck fleets, (b) passenger/truck ELT captured through national EPR operators such as ANIP/Reciclanip (Brazil), Rueda Verde (Colombia), and SEGINUS/Ecovalor (Ecuador), (c) cement co-processor feedstock supply agreements, and (d) the Chilean stockpile drawdown. No single stream will meet the target.
- **Brazil is the largest single-country supply.** Reciclanip's industry EPR already recovers ~400 kt/year of tire material under CONAMA Resolution 416/2009; Vale's autonomous Komatsu 930E fleets add to the OTR pool; and Votorantim, CSN Cimentos, Holcim, and InterCement are running kilns hungry for tire-derived fuel (TDF). A properly structured Brazilian anchor contract can supply 35-45% of total.
- **Chile is the most compliance-driven market.** Ley 20.920 (Ley REP) plus the tire-specific decree set a 100% mining-tire recycling target by 2030 (25% already mandatory in 2023, 75% by 2027). Codelco, BHP, Antofagasta, and Anglo American have active REP obligations and limited domestic processing capacity. The 500-kt accumulated stockpile is a once-only commercial opportunity.
- **Peru hosts five of the world's top-10 copper mines but has thin domestic capacity.** DS 024-2021-MINAM (Régimen Especial de Gestión y Manejo de Lantas Usadas) formalized obligations in 2021-2022 but recycling infrastructure is limited — this is supply-rich, demand-thin, and ideally suited to an integrated foreign disposal partner.
- **Argentina, Colombia, Ecuador, and Bolivia add ~275-325 kt/year of addressable supply.** Colombia has the most mature EPR (Resolución 1326/2017, Rueda Verde program). Ecuador's SEGINUS/Ecovalor model is the most advanced south of Colombia. Argentina is fragmented but large. Bolivia is small but has no formal infrastructure — a fast-mover advantage.
- **Logistics out of South America is very manageable.** Primary consolidation ports: Santos (BR), Callao and Matarani (PE), Antofagasta and San Antonio (CL), Buenaventura (CO), Guayaquil (EC), Buenos Aires (AR). Bolivia is land-locked and routes via Arica (CL) with a 30-50% cost penalty.

## **12-month sourcing recommendation**

Anchor commercial activity in four waves (months 1-3 Chile/Brazil/Peru Tier-1; 4-6 contractors and Tier-2 operators; 7-9 Ecuador/Argentina/Colombia EPR; 10-12 Bolivia + pan-regional consolidation). Blend four supply streams: mining OTR direct, mining-contractor fleets, EPR-system operators for municipal/passenger/truck, and cement co-processor offtake. At 40% penetration of recurring annual supply plus full Chile stockpile drawdown, the target is achievable with a 10-15% contingency margin.

## 1. The 1,000,000-Ton Challenge

A 12-month target of 1,000,000 metric tons is significant in absolute terms. For context, Grand View Research and ETRMA sources place global scrap-tire generation at about 13-17 Mt per year, of which the best-documented fraction — roughly 35-50% — is formally recycled. At 1 Mt, Americans Trades would be handling approximately 6-8% of total global annual ELT volume through one continent and one company's channels. That is aggressive but not unprecedented — Liberty Tire Recycling in North America already processes around 2 Mt equivalent annually.

Within South America specifically, the math is tighter. Our country-level build-up estimates annual recurring generation at roughly 1.13-1.27 Mt across the seven target countries. A 1.0-Mt target in 12 months therefore equals 79-88% of total continental scrap-tire generation. The implication: Americans Trades cannot rely on any single stream or a handful of mining majors. The strategy must mobilize mining OTR, mining-contractor fleets, passenger/commercial (P&T) streams captured through EPR system operators, cement co-processors, and Chile's accumulated stockpile simultaneously.

We have quantified each stream in Section 3. The net takeaway: the target is feasible if Americans Trades secures (1) two anchor mining majors, (2) two cement co-processor offtake agreements, (3) one national EPR partnership in Brazil or Colombia, and (4) the Chilean stockpile drawdown. No single element of that list carries the target; in combination, they do.

### Unit conversions used in this report

- A 400-ton-class haul truck (Cat 797F, Komatsu 930E-5) carries six OTR tires. Each 59/80R63 tire weighs approximately 5,300 kg, so one truck represents ~31.8 tons of tire material per complete replacement.
- Typical replacement frequency is 0.7-1.2 sets per truck per year, depending on operating conditions, altitude, abrasion, and heat. We model a conservative 0.8 sets/truck/year.
- A 200-truck fleet therefore generates  $\approx 200 \times 31.8 \times 0.8 = 5,100$  tons of scrap OTR per year. Support and service vehicles add 5-10%.
- Passenger and truck (P&T) tire weights vary from 8 kg (passenger radial) to 70 kg (heavy-commercial drive tire). Conversions from units to tons use the EPR-industry standard of 10.5 kg blended average where only unit counts are reported.

## 2. Regional Market Context

### Regulatory convergence is the tailwind

Every Tier-1 and Tier-2 country in this survey has, since 2016-2022, adopted a variant of Extended Producer Responsibility (EPR) applicable to tires. The frameworks differ in scope and enforcement, but the direction is consistent: the costs and liabilities of end-of-life tires are being moved onto producers, importers, and ultimately onto fleet operators who must show auditable disposal pathways. This legal movement is the single most important demand driver for Americas Trades' service.

Country	Anchor Law	Status / Key Deadlines
Chile	Ley 20.920 (Ley REP) + Tire Decree	25% recycling of mining tires mandatory in 2023; 75% by 2027; 100% by 2030. Enforcement active.
Brazil	CONAMA Resolution 416/2009	1-for-1 sold vs recycled ratio on weight; 100% of replacement-market tires; ~400 kt/year already captured by Reciclanip.
Peru	D.S. 024-2021-MINAM + D.S. 001-2022-MINAM	Régimen Especial de Gestión de Llantas Usadas; EPR principle integrated into D.L. 1278. Enforcement ramping.
Colombia	Resolución 1326/2017	Selective Collection System; ANDI Rueda Verde operates; ~60% capture rate in 2024.
Ecuador	Acuerdo Ministerial + SEGINUS/Ecovalor	Most advanced south of Colombia; per-tire fee (Ecovalor) funds collection.
Argentina	Ley 25.916 (waste framework) + provincial	No federal tire-specific EPR; province-level only (Buenos Aires OPDS most active).
Bolivia	Ley 755 / Residuos Sólidos	No tire-specific regime; enforcement weak; formal recycling capacity near zero.

### Supply-side drivers

- Mining fleet electrification is increasing tire turnover. BHP's Escondida fleet conversion to CAT 798 AC and Anglo American's Quellaveco autonomous fleet mean that in the next 24-36 months a large share of legacy tires will cycle out.
- Tire OEM circularity pledges (Michelin, Bridgestone, Goodyear) are creating feedstock competition — in a way that benefits Americas Trades, because OEMs want long-term offtake arrangements with disposal partners rather than in-house processing everywhere.
- Cement-industry decarbonization is increasing demand for tire-derived fuel (TDF). Brazilian cement has a 32% thermal substitution rate in 2023 and targets over 40%. CSN Cimentos is at 50% TSR by 2030. This translates into structural demand for shredded tire feedstock.
- Stockpile liabilities are resolving. Chile is publicly drawing down its ~500 kt stockpile via the Kal Tire and Michelin facilities; similar legacy stockpiles exist across Peru (Southern Copper, Las Bambas) and will need to resolve under DS 024-2021.

## Competitive landscape

Local competition is emerging but remains concentrated at small scale. The three most visible incumbents are Kal Tire Mining Tire Solutions (7,500 t/year thermal conversion in Antofagasta, Chile; Mitsui-backed), Michelin/Enviro La Negra (2,200 OTR tires/year in Antofagasta; technology partnership with Sweden's Enviro), and Reciclanip's 47+ partners in Brazil. At national level, Polambiente (Chile, 11 kt/y mechanical), Regomax (Argentina, ~4 kt/y), and a dozen small Brazilian shredders round out the landscape. None currently has the scale to absorb a 1-Mt/year continental flow, which is the market gap Americans Trades would fill — either as a buyer and aggregator for these processors, or as a disposal/export backstop when their capacity is full.

### 3. Supply Streams and Tonnage Build-Up

The table below summarizes our country-level supply build. Mining OTR figures are fleet-derived using the 0.8 sets/truck/year assumption; passenger + truck (P&T) figures aggregate market research data from Grand View Research, Gradeall industry reports, Reciclanip/ANIP, ANDI, and SEGINUS annual disclosures. Formal capture rate is the fraction of P&T tonnage currently going to a regulated processor today — the remainder is the 'grey' volume that Americans Trades could capture.

Country	Mining OTR (t/y)	P&T ELT (t/y)	Stockpile (t)	Capture now	Notes
Chile	40,000	180,000	500,000	~40%	100% 2030 target; 500 kt stockpile open
Brazil	55,000	400,000	—	~90%	Mature EPR; sell-through via ANIP/Reciclanip
Peru	35,000	90,000	—	~15%	DS 024-2021; thin recycler base — best match
Argentina	8,000	130,000	—	~20%	Provincial patchwork; Regomax capacity-constrained
Colombia	12,000	95,000	—	~60%	Rueda Verde; coal + nickel fleets
Ecuador	5,000	80,000	—	~22%	Ecovalor fee; Mirador + Fruta del Norte
Bolivia	3,000	45,000	—	~0%	Greenfield; must route via Arica (CL)

Adding rows: recurring annual supply totals ~158 kt mining OTR + ~1,020 kt P&T ELT = ~1,178 kt/year, plus the one-time 500 kt Chilean stockpile. This is the ceiling — 100% capture is not achievable. At a more realistic 40% penetration of recurring supply (471 kt) plus full stockpile drawdown (500 kt), Americans Trades can reach ~971 kt in 12 months. Closing to 1,000 kt requires one of: an incremental contract with ANIP/Reciclanip in Brazil, a cement-co-processor offtake above 30 kt, or Peruvian stockpile remediation.

#### Stream-by-stream breakdown

##### 3.1 Mining OTR (high-value, low-volume)

Total addressable ~150-175 kt/year. Concentrated in ~12 mining groups (Codelco, BHP, Antofagasta, Anglo American, Glencore, Vale, Southern Copper, Freeport, MMG, Grupo México, Cerrejón, South32). Per-ton compliance value is the highest in the market — mines will pay 100-300 USD/ton for a certified disposal route. Commercial model: direct MSA with the operator or its mining contractor. Volume per account: 2,000-11,000 tons/year.

### **3.2 Passenger and truck ELT (low-value, high-volume)**

Total addressable ~1,020 kt/year. Accessed primarily through national EPR compliance operators, with the largest single contract available being ANIP/Reciclanip in Brazil (~400 kt/y flows through the system). Rueda Verde in Colombia and SEGINUS in Ecuador are the next-best one-contract volumes. Per-ton compliance value is 20-60 USD/ton (lower than mining OTR), but throughput is orders of magnitude larger. Commercial model: become an approved downstream processor/exporter for the EPR operator.

### **3.3 Cement co-processor feedstock supply**

Cement kilns across the region have been ramping alternative-fuels rate (AFR) for a decade. Tire-derived fuel is the most attractive single feedstock (~32 MJ/kg, steel acts as flux in clinker). Votorantim in Brazil just announced R\$330M of investment (Jan 2025); CSN Cimentos targets 50% TSR by 2030. We estimate cement co-processors can absorb 200-250 kt/year in the region — Americans Trades can position as the aggregator that sources, shreds to kiln spec, and delivers on take-or-pay terms.

### **3.4 Chile legacy stockpile**

Kal Tire first disclosed a ~500 kt stockpile of legacy OTR tires in northern Chile. Volumes are accumulating at roughly 15 kt/month because P&T generation exceeds processing capacity. Under Ley REP, producers (tire importers) are liable for this material. This is a one-shot commercial opportunity: whoever contracts the drawdown gets 12-24 months of steady, large-lot volume. Americans Trades should approach MMA directly and the major tire importers (Michelin, Bridgestone) in parallel.

## 4. Country Deep Dives

### 4.1 Chile — Tier 1

#### Market size and regulation

Chile generates approximately 180,000 tons/year of end-of-life tires and has an additional ~500,000 t legacy stockpile, principally of mining OTR tires, accumulating at ~15 kt/month. Ley 20.920 (Ley REP, enacted 2016) with its tire-specific decree is the strictest in the region: 25% of mining tires had to be recycled in 2023, 75% by 2027, and 100% by 2030. Compliance is actively enforced through Chile's national environmental court, which has already rejected industry challenges.

#### Mining sector

Chile is the world's largest copper producer (27% of global output). Six of the world's ten largest copper mines operate here, driving the largest OTR tire consumption outside Australia. Key fleets:

- Codelco (state-owned) — Chuquibambilla, El Teniente, Ministro Hales, Radomiro Tomic, Salvador, Andina, Gabriela Mistral. Multiple hundreds of haul trucks; publicly committed to 100% tire recycling by 2030.
- BHP Escondida (49%) — World's largest copper mine, 160+ haul trucks; replacing fleet with CAT 798 AC electric drive trucks; significant one-time retirement wave.
- Antofagasta Minerals — Los Pelambres, Centinela, Zaldívar; 4 operations; London-listed with strict ESG KPIs.
- Anglo American — Los Bronces, El Soldado, and 44% of Collahuasi; part of FutureSmart Mining circularity commitment.
- Glencore — 44% of Collahuasi + Lomas Bayas; runs Komatsu AHS autonomous fleet.

#### Recyclers and competition

- Kal Tire MTS Antofagasta — thermal conversion; 7,500 t/year capacity; Mitsui JV; market leader in mining OTR recycling. Competitor if pursuing mining OTR directly, potential partner if supplying feedstock.
- Michelin / Enviro La Negra — 2,200 giant mining tires/year; opened late 2024; the first specialized mining tire recycling plant worldwide.
- Polambiente — Santiago; 11,000 t/year mechanical granulation for civil applications; serves mostly passenger/truck ELT.

#### Logistics

Port of Antofagasta is the primary export gateway for northern mining output and recycled material. San Antonio handles the largest container throughput in central Chile. Iquique (ZOFRI free zone) offers consolidation benefits. Arica serves Bolivia exports and remote-north mines.

#### Commercial approach

Anchor with Codelco or BHP (both publicly committed to 100% recycling by 2030 and already under EPR audit). Secondary track: contact MMA's Oficina de Economía Circular regarding

stockpile tenders. Expect 9-12 months to close an anchor MSA. Price point: 120-200 USD/ton disposal fee from operator for OTR; compliance-driven commitment terms 3-5 years.

## 4.2 Brazil — Tier 1

### Market size and regulation

Brazil is the largest single-country scrap-tire market in the region. ANIP (the national tire industry association) operates the Reciclanip program under CONAMA Resolution 416/2009, which requires a 1-to-1 weight ratio of tires recycled to tires sold. In 2024, approximately 95 million tires (400,000 tons of unusable product) cycled through the formal system. From 2009 to 2020 cumulatively, 7.7 Mt have been properly disposed. The Brazilian tire recycling market was USD 265.9 M in 2024, growing 4% CAGR.

### Mining sector

- Vale S.A. — Carajás, Itabira, Brucutu, S11D; world's largest iron-ore producer; autonomous Komatsu 930E fleets; passed 100 Mt moved autonomously at Brucutu (2024). OTR volume is the largest of any South American operator outside Chile.
- Samarco (Vale + BHP JV) — 15 Mt pellets 2025; post-Fundão restart.
- Anglo American Minas-Rio — iron ore; Serra da Serpentina integration 2024.
- Kinross Paracatu — largest surface gold mine in Brazil; Canadian-listed.
- MRN (Mineração Rio do Norte) — Brazil's largest bauxite; Rio Tinto/South32/Glencore ownership.
- CSN Mineração; Sigma Lithium (growing fast, BNDES-financed); CBMM (niobium); Nexa Resources.

### Recyclers, reverse logistics, and cement co-processors

- Reciclanip — industry EPR operator; 1,024+ collection points; 47+ processor partners; includes BS Colway, Borcol, and CBL.
- Votorantim Cimentos — co-processing pioneer (since 1992); new dedicated tire shredding facility at Cuiabá; R\$330 M investment (2025); Rio Branco do Sul plant runs 100% tire-derived fuel.
- CSN Cimentos — 50% thermal substitution target by 2030; every kiln AFR-capable.
- InterCement, Holcim Brasil — both in the co-processing network.

Of Brazil's 100 cement plants, ~60% are licensed to co-process. In 2023 the industry averaged 32% AFR, exceeding interim targets. Approximately 57% of the 260 kt estimated annual generation currently flows to cement kilns. This is the single largest TDF market in Latin America.

### Logistics

Santos is the largest port (~180 Mt/y); Paranaguá (~67 Mt/y) is the second; Itaquí is best-positioned for north/northeast mining feedstock (Carajás via rail); Rio de Janeiro handles 15.5 Mt and 1.2 M TEU (2024). Brazilian port capacity is a non-constraint for this scale.

### Commercial approach

Brazil is the highest-volume single-country opportunity. Recommended priorities: (1) Reciclanip/ANIP partnership — approved downstream export processor role; (2) Vale enterprise MSA for all sites; (3) Votorantim Cimentos TDF offtake; (4) CSN Cimentos TDF offtake. Pricing

is tighter than Chile/Peru because of mature local competition, but volume is 3-5x larger. Target 250-350 kt/y from Brazil alone.

## 4.3 Peru — Tier 1

### Market size and regulation

Peru's tire recycling market was USD 50.9 M in 2024 (3.6% CAGR). Peru hosts five of the world's top-10 copper mines (Antamina, Cerro Verde, Las Bambas, Quellaveco, Toquepala/Cuajone). DS 024-2021-MINAM established the Special Regime for Management of Used Tires in July 2021; DS 001-2022-MINAM integrated EPR principles into the underlying solid-waste law (D.L. 1278) in January 2022. Enforcement is ramping but the recycling base is thin — a true supply-rich, demand-thin market.

### Mining sector

- Antamina (BHP 33.75% / Glencore 33.75% / Teck 22.5% / Mitsubishi 10%) — Cu + Zn; Junín/Áncash; CAT 798 fleet via Ferreyros. Peru's largest mine.
- Cerro Verde (Freeport-McMoRan 55% / Sumitomo 21% / Buenaventura 19.6%) — Arequipa; CAT 798 + 372 t electric fleet; Copper Mark certified.
- Las Bambas (MMG/Minmetals) — Apurímac; ~250 trucks; 2% of global copper; legacy stockpile issue.
- Quellaveco (Anglo American) — Moquegua; ~327 t fleet; first South American autonomous copper mine.
- Southern Peru (Grupo México) — Toquepala, Cuajone; legacy operations with aging fleets.
- Toromocho (Chinalco) — Junín; 4,600 m altitude copper.

### Recyclers and cement co-processors

- RMD (Lima, Spanish origin); Neuma Perú (retreading specialist); Rodacaucho (shredding, granulate); Regomax; Tricorzo S.A.
- UNACEM (central Peru, dominant cement producer) and Cementos Pacasmayo (3 plants, 4.9 Mt cement/year) — candidate TDF co-processors.
- Cementos Yura (Grupo Gloria, southern Peru).

### Logistics

Callao (DP World) handles ~70% of national containerized cargo; Matarani serves the southern mining corridor (Antamina, Cerro Verde copper concentrate routes); Paita handles northern Peru. Matarani is the best candidate for large OTR export.

### Commercial approach

Peru is the best single-country match for Americans Trades' certified disposal value proposition. Recommended priorities: (1) Antamina anchor MSA (BHP-led ESG governance); (2) Cerro Verde secondary anchor; (3) UNACEM and Cementos Pacasmayo TDF agreements; (4) MINAM Dirección General de Residuos Sólidos policy engagement. Expect 6-9 months to close first MSA.

## 4.4 Colombia — Tier 2

### Market size and regulation

Colombia generates approximately 100,000 t/year of ELT and has the most mature EPR of the Tier-2 markets. Resolución 1326/2017 created the Sistema de Recolección Selectiva de Llantas Usadas, operated by ANDI (national industry association) as the Rueda Verde program. Capture rate is ~60% — leaving ~40,000 t/year outside the formal system, which is the addressable gap for Americans Trades.

### Mining sector

- Cerrejón (Glencore) — Guajira; largest open-pit thermal coal mine in LatAm; 258-truck fleet; active ESG reputation-repair agenda.
- Drummond, Prodeco — coal.
- Cerro Matoso (South32) — Córdoba; largest nickel producer in the region; 200-250 trucks.
- Mineros SA — gold.
- AngloGold Ashanti Quebradona (pipeline copper-gold project).

### Recyclers

- ANDI Rueda Verde system operators: Reencacucho, Mundo Limpio.
- MAC (automotive recycling).
- Argos Cementos and Cemex Colombia — cement co-processors; both signatories to global net-zero.

### Logistics

Buenaventura (Pacific, 1.2 M TEU) serves the mining corridor via rail. Cartagena (Caribbean) is the best option for European and US-East-Coast shipping. Both are operationally strong.

### Commercial approach

Primary: enter through Rueda Verde as an approved downstream processor/exporter.  
Secondary: direct MSAs with Cerrejón and Cerro Matoso. Cerrejón is particularly receptive given its operational transition toward closure and residual liability management.

## 4.5 Ecuador — Tier 2

Ecuador operates the most sophisticated EPR south of Colombia. The Acuerdo Ministerial 020 framework is operationalized through SEGINUS and Ecovalor (the per-tire fee). Generation is ~70-90 kt/y with ~22% formal capture. Mining is growing rapidly: Mirador (Ecuacorriente/CRCC) is Ecuador's first large-scale open-pit copper mine (250-350 haul trucks); Fruta del Norte (Lundin Gold) is an underground gold operation; Curipamba and Cascabel are in permitting. Recyclers Ecocaucho and Renova operate at modest scale. Port of Guayaquil is the region's most efficient, with direct Pacific-Asia routes. Commercial approach: partner with SEGINUS to become a certified downstream processor.

## 4.6 Argentina — Tier 2 (high strategic growth)

Argentina generates ~130-150 kt/y of P&T ELT plus a growing mining-OTR base. There is no federal tire EPR; the regulatory patchwork is provincial, with Buenos Aires (OPDS) the most active. Lithium and copper are both on multi-year growth ramps: Livent/Arcadium, Ganfeng, Lithium Americas (lithium); Josemaría (Lundin), Los Azules (McEwen), El Pachón (Glencore); gold majors Barrick Veladero, Newmont Cerro Negro. Regomax is the incumbent recycler; Loma Negra (InterCement) and Holcim Argentina offer cement co-processing. Approach: pair provincial authorities and Barrick/Glencore global programs. Expect longer sales cycles and currency/macro sensitivity.

#### **4.7 Bolivia — Tier 3 (small, greenfield)**

Bolivia has no tire-specific regulation, essentially no commercial recycling capacity, and is land-locked. Estimated generation is ~35-50 kt/y. COMIBOL, Sinchi Wayra (Glencore), Minera San Cristóbal, YLB (lithium) are the key fleets. Exports must route via Arica (CL) with a 30-50% logistics-cost penalty. COBOCE is the main cement producer. Strategically, Bolivia is a Wave-4 play: small but first-mover advantage is meaningful because there is literally no incumbent infrastructure.

## 5. Top Prospects — Priority Ranking

The companion Excel workbook

(AmericansTrades\_SouthAmerica\_ScrapTire\_ProspectList.xlsx) contains 60 ranked prospects with priority scores, category, country, estimated annual tire volume, decision-maker role guidance, and website. The top 15 are summarized below.

#	Prospect	Country	Category	Score	Volume (t/y)
1	Codelco	Chile	Mining Operator	98	9,000
2	BHP Escondida / Pampa Norte	Chile	Mining Operator	96	8,500
3	Vale S.A.	Brazil	Mining Operator	95	11,000
4	Michelin (La Negra + circularity)	Multi	Tire OEM / Service	94	6,000
5	Antamina (BHP/Glencore/Teck)	Peru	Mining Operator	93	4,500
6	Votorantim Cimentos	Brazil	Cement Co-processor	93	70,000
7	ANIP / Reciclanip	Brazil	EPR Operator	92	95,000
8	Antofagasta Minerals	Chile	Mining Operator	92	5,500
9	Anglo American (PE/CL/BR)	Multi	Mining Operator	92	8,000
10	Bridgestone Off-the-Road	Multi	Tire OEM / Service	92	5,500
11	Cerrejón (Glencore)	Colombia	Mining Operator	90	3,000
12	Thiess	Multi	Mining Contractor	90	12,000
13	Kal Tire Mining Tire Group	Chile	Tire OEM / Service	90	7,500
14	Southern Copper	Peru	Mining Operator	89	6,500
15	Freeport-McMoRan Cerro Verde	Peru	Mining Operator	88	4,500

Priority scores weight six factors: (1) public ESG/recycling commitment, (2) fleet or stream size, (3) regulatory compliance urgency, (4) sales cycle (access), (5) payment reliability, (6) expansion potential for enterprise-wide MSAs. The top-15 alone represent ~245,000 t/year of directly addressable supply — if Americans Trades wins the first three on each category (mining, EPR, cement) the 1-Mt target is within reach.

## 6. 12-Month Outreach Sequence

### Wave 1 — Months 1-3: Chile, Brazil, Peru anchors

- Targets: Codelco, BHP, Antofagasta, Vale, Antamina, Cerro Verde, Michelin, Bridgestone, Kal Tire, Votorantim, ANIP, UNACEM.
- Volume milestone: first 400 kt under letter-of-intent.
- Operational build: open Santiago + São Paulo commercial offices, register with one EPR system operator.

### Wave 2 — Months 4-6: Contractors + Tier-2 operators + Colombia

- Targets: Thiess, Stracon, Southern Copper, Las Bambas, Anglo Collahuasi, CSN Cimentos, InterCement, Cerrejón, Cerro Matoso, Rueda Verde, Polambiente.
- Volume milestone: cumulative 700 kt under contract or LOI.
- Key event: Chile stockpile drawdown LOI signed (MMA or importer consortium).

### Wave 3 — Months 7-9: Ecuador + Argentina + emerging mines

- Targets: Mirador, Fruta del Norte, Lundin Josemaría, Barrick Veladero, Glencore AR, Loma Negra, Holcim Ecuador, Regomax, SEGINUS, Cemex Colombia.
- Volume milestone: cumulative 900 kt.
- Key event: Ecuadorian EPR integration; 2 Argentine lithium/copper MOUs.

### Wave 4 — Months 10-12: Bolivia + consolidation + Year-2 pipeline

- Targets: COBOCE, YLB, MMG Las Bambas expansion, legacy stockpile remediation tenders.
- Volume milestone: 1,000 kt under contract.
- Key event: publish 2027 pipeline commitments; renew anchor MSAs on multi-year terms.

## 7. Commercial Model — Four Complementary Products

- **Product 1 — Certified Disposal-as-a-Service (DaaS).** Mines pay a gate fee (100-300 USD/t) for pickup, logistics, processing, and reporting. Long-term MSA (3-5 year). Highest margin. Targets: mining majors and large contractors.
- **Product 2 — EPR Compliance Downstream.** Americans Trades registers as approved downstream processor/exporter for Reciclanip (BR), Rueda Verde (CO), SEGINUS (EC). System operator pays a processing fee (40-80 USD/t). Largest volume; thinnest margin.
- **Product 3 — Cement Co-Processor Feedstock Supply.** Americans Trades sources and shreds tire feedstock to kiln spec; cement co-processor (Votorantim, CSN, Holcim, UNACEM) pays a feedstock fee or take-or-pay on a per-tonne basis. Price offsets coal/petcoke; typical 30-90 USD/t to supplier.
- **Product 4 — Legacy Stockpile Remediation.** Chile and Peru have legacy stockpiles. Americans Trades tenders for multi-year drawdown contracts with tire-importer consortiums

and environmental authorities. One-time large-lot revenue; 150-250 USD/t including logistics.

## 8. Logistics and Ports

Country	Port	Suitability	Use case
Chile	Antofagasta	Excellent	Primary export for mining OTR outputs
Chile	San Antonio	Good	Container consolidation for Reciclanip
Chile	Iquique / ZOFRI	Good	Free-zone consolidation + Bolivia exports
Peru	Callao	Excellent	70% of national container traffic
Peru	Matarani	Good	Southern mining corridor; Antamina / Cerro Verde
Brazil	Santos	Excellent	Largest port; all container types; ~180 Mt/year
Brazil	Paranaguá	Good	Southern alternative
Brazil	Itaqui	Good	North/NE; Carajás via rail
Colombia	Buenaventura	Excellent	Mining corridor; rail from Cerrejón / Cerro Matoso
Colombia	Cartagena	Good	EU / US-East-Coast shipping
Ecuador	Guayaquil	Excellent	Most efficient port in region
Argentina	Buenos Aires	Good	National gateway
Bolivia	Arica (via CL)	Only option	+30-50% logistics cost

## 9. Risks and Mitigation

- **Regulatory slippage (Chile 2023 target missed).** Ley REP compliance in Chile slipped on the 2023 passenger/truck target, demonstrating enforcement is uneven. Mitigation: anchor around mining OTR first, where 2030 deadlines carry clearer accountability and public visibility.
- **Currency and macro volatility.** Argentina, Brazil, and Peru have meaningful currency risk. Mitigation: USD-denominated contracts where possible; escalation clauses linked to local inflation index for long-term MSAs in BRL/PEN/ARS.
- **Environmental permit timeliness.** Certified disposal/export permits can take 6-18 months in several jurisdictions. Mitigation: begin permit applications in parallel with commercial outreach; partner with local licensed processors where feasible.
- **Competition from tire OEM circular programs.** Michelin + Enviro, Bridgestone Enliten, and Kal Tire Mitsui JV are all expanding. Mitigation: position as capacity complement (not substitute); they cannot scale at 1-Mt continental speed in 12 months.

- **Logistics bottlenecks — Bolivia routing.** Arica routing for Bolivia is vulnerable to labor action and cross-border delays. Mitigation: treat Bolivia volume as incremental, not critical-path, for the 12-month target.
- **Reputation and ESG integrity of disposal pathway.** Mining majors will audit disposal chain of custody (chain-of-custody, emissions disclosure, illegal dumping prevention). Mitigation: invest early in traceability and digital manifest tools (e.g., blockchain or ERP-integrated chain-of-custody); ISO 14001 + tire-specific standards.

## 10. Conclusion and Next Steps

South America can supply 1,000,000 metric tons of certified scrap tires over 12 months, but only via a multi-country, multi-stream strategy anchored by Chilean REP compliance, Brazilian EPR throughput, and cement-industry TDF demand — not through mining OTR alone. Americans Trades is entering at a favorable moment: regulatory frameworks are tightening across all seven countries, legacy stockpiles are resolving under enforcement, local processing capacity is concentrated in a few small incumbents, and tire OEM circularity pledges are creating structural offtake demand rather than displacing independent aggregators.

### Recommended next 30 days

1. Deploy country leads for Chile, Brazil, and Peru. Local presence is essential in Santiago, São Paulo, and Lima.
2. Initiate MSA discussions with Codelco, BHP Escondida, Vale, and Antamina. Target first LOIs by month 2.
3. Register for Reciclanip approved-downstream status in Brazil and begin Rueda Verde dialogue in Colombia.
4. Open MMA Chile engagement on the legacy stockpile tender path and file formal expression of interest with tire importer consortium (ANIR/CAMCHAL).
5. Secure cement-industry anchor: approach Votorantim (BR) and UNACEM (PE) for TDF supply MOUs.
6. Build traceability and reporting platform (digital manifest, ESG-audit-ready dashboards) before wave 1 commercial close.

## Appendix A — Principal Sources

- Kal Tire Mining, Antofagasta facility and Chile stockpile disclosure — <https://www.kaltiremining.com/>
- Ministerio del Medio Ambiente — Ley REP / Economía Circular, Chile — <https://economiecircualar.mma.gob.cl/ley-rep/>
- Michelin / Enviro La Negra (Antofagasta) inauguration — <https://blog.investchile.gob.cl/michelin-to-build-new-generation-tire-recycling-plant-in-antofagasta/>
- Peru DS 024-2021-MINAM — Régimen Especial de Gestión y Manejo de Llantas Usadas — <https://busquedas.elperuano.pe/normaslegales/decreto-supremo-que-aprueba-el-regimen-especial-de-gestion-y-decreto-supremo-n-024-2021-minam-1976353-1/>
- Peru DS 001-2022-MINAM — EPR integration — <https://www.gob.pe/institucion/minam/normas-legales/2649587-001-2022-minam>
- Antamina operations — BHP / Teck — <https://www.bhp.com/what-we-do/global-locations/peru-antamina/>
- Freeport-McMoRan — Cerro Verde operations — <https://www.fcx.com/operations/south-america>

- MMG — Las Bambas — <https://www.mmg.com/our-business/las-bambas/>
- CONAMA Resolution 416/2009, Brazil — [https://conama.mma.gov.br/?id=597&option=com\\_sisconama&task=arquivo.download](https://conama.mma.gov.br/?id=597&option=com_sisconama&task=arquivo.download)
- ANIP / Reciclanip — Brazil — <https://www.anip.com.br/>
- Vale S.A. — Brazil operations — <https://www.vale.com/brazil>
- Votorantim Cimentos R\$330M investment (Jan 2025) — <https://www.worldcement.com/the-americas/05082025/votorantim-cimentos-announces-r330-million-investment-in-brazil/>
- Colombia Resolución 1326/2017 — selective collection of used tires — <https://www.minambiente.gov.co/>
- Ecuador SEGINUS/Ecovalor EPR operator — <https://seginus.ec/>
- Argentina Loma Negra (InterCement) — <https://www.intercement.com/>
- Grand View Research — Tire Recycling Market 2024 — <https://www.grandviewresearch.com/industry-analysis/tire-recycling-market-report>
- ETRMA — European Tire Recycling Association statistics — <https://www.etrma.org/statistics/>
- WBCSD Tire Industry Project — End-of-Life Tires and Circular Economy — <https://www.wbcd.org/Sector-Projects/Tire-Industry-Project/End-of-Life-Tires-ELTs>
- Tyre Stewardship Australia — OTR mining program (benchmark) — <https://www.tyrestewardship.org.au/otr/>
- Americans Trades internal brief — Worldwide Market Survey (client input)

## Appendix B — Methodology Notes

Volume estimates combine (a) published national scrap-tire data from industry associations and government regulators, (b) fleet-level OTR calculations using OEM-published tire weights (Michelin XDR3 and Bridgestone V-Steel 59/80R63 at 5,300 kg each; Komatsu 930E-5 53/80R63 at similar weight), (c) EPR operator annual disclosures (ANIP/Reciclanip, ANDI Rueda Verde, SEGINUS), and (d) cement association data (SNIC Brazil, FICEM regional). Capture rates are industry-reported and directional. All figures should be verified through direct commercial diligence before binding contract. Currency-denominated market values use 2024 full-year data and do not assume currency hedging.

All seven country chapters apply the same analytical frame: regulation → supply streams (mining OTR, P&T ELT, stockpile) → operators → recyclers/processors → ports → commercial approach. Readers comparing countries should focus on the capture rate column in Section 3 — high capture = low gap for a new entrant; low capture = higher commercial opportunity for Americans Trades.

*Prepared by Americans Trades (Scrap Tire Disposal Division), April 2026. Directional estimates; verify at pre-contract stage.*