

Business Case Document

Indirect Tax Reporting for Oil Products – Release 1

Version 1.5

Prepared by: Shanna

Date last updated: 25-Aug-2025

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1. Document History

1.1 Revision History

| Version | Date | Author | Revision Description |
|---------|-------------|--------|---|
| 1.0 | 31-Jul-2025 | Shanna | Initial draft |
| 1.1 | 4-Aug-2025 | Shanna | Add content to the Stakeholder, Recommendation, Executive Summary and Implementation Plan sections. |
| 1.2 | 11-Aug-2025 | Shanna | Updated based on feedback from project sponsor. Added Governance Plan and Transition Plan. Specified more about selecting a tool. Added opportunity cost to Disbenefits table. Added high level process flow and high-level solution diagram. |
| 1.3 | 15-Aug-2025 | Shanna | Added Context Models for current and future states. Made minor revisions. |
| 1.4 | 19-Aug-2025 | Shanna | Added future state process flow. |
| 1.5 | 25-Aug-2025 | Shanna | Updated format of sub section headers in the Recommendations section. |

1.2 Document Approval

| Name | Role | Approve or Review | Date |
|------------|---------------------------|-------------------|-------------|
| First Last | Indirect Tax Team Manager | Approve | 27-Aug-2025 |
| First Last | Project Sponsor | Approve | 27-Aug-2025 |
| First Last | IT / ETRM System Owner | Approve | 27-Aug-2025 |
| | | | |

1.3 Distribution

| Name | Role | Date |
|------------|---------------------------|-------------|
| First Last | Project Sponsor | 26-Aug-2025 |
| First Last | Indirect Tax Team Manager | 26-Aug-2025 |
| First Last | Tax Analyst SME | 26-Aug-2025 |
| First Last | Trade Operations SME | 26-Aug-2025 |
| First Last | Logistics Team SME | 26-Aug-2025 |
| First Last | Regulatory Affairs | 26-Aug-2025 |
| First Last | Tax Process Architect | 26-Aug-2025 |
| First Last | IT / ETRM System Owner | 26-Aug-2025 |

2. Executive Summary

The current indirect tax reporting process within our ETRM system is manual, fragmented, and increasingly unsustainable. Tax analysts rely on spreadsheets and workarounds to extract and reconcile data across multiple modules. This method is prone to error, slow to adapt to regulatory change, and difficult to scale.

To address this, we propose implementing an external, low-code tax rules engine integrated with our ETRM platform. This solution enables real-time validation, automates monthly tax reporting, improves audit readiness, and empowers tax analysts to manage rule updates without IT dependency.

With 90% automation, 50% fewer errors, and 100% traceability, the project is expected to deliver \$1.5M–\$1.9M in net savings over 3 years, while reducing compliance risk and positioning us for scalable, global tax operations.

3. Problem Statement

Our current indirect tax reporting process within the ETRM system is manual, fragmented, and increasingly unsustainable due to regulatory and operational complexity. Key issues include:

- **Manual data handling:** Tax analysts must extract, compile, and reconcile tax data from multiple ETRM modules (trade capture, logistics, invoicing) using spreadsheets and workarounds.
- **Error-prone workflows:** Manual processes increase the risk of inaccuracies, delays, and inconsistent application of jurisdiction-specific tax rules.
- **Siloed data:** ETRM modules were not designed with tax reporting in mind, making it difficult to align transactions across systems for complete, accurate tax calculations.
- **Regulatory volatility:** Frequent updates to indirect tax rules across states, provinces, and countries are hard to track and apply consistently.
- **High audit and compliance risk:** The current process lacks transparency, standardization, and traceability, increasing the risk of audit findings and non-compliance penalties.
- **Limited scalability:** The approach relies on institutional knowledge and manual expertise, which does not scale as we grow into new markets or modify our trade operations.

To address these risks, we need a more integrated, automated, and scalable tax reporting capability that can:

- Generate jurisdiction-specific tax outputs in real-time or near-real-time
- Apply flexible, rule-based logic across diverse transaction types
- Reduce manual effort while increasing consistency and audit readiness

4. Goals, Alignment & Metrics

4.1 Objectives

1. Automate generation of **monthly value and volume-based reports** from trade, movement, and invoicing modules to eliminate manual compilation and reconciliation tasks.
2. Enable **real-time validation** of transaction data (volume, pricing, tax fields) to reduce errors and enforce tax rule compliance at the point of entry.
3. Standardize and **map master data elements** (e.g., product codes, tax regions, counterparties) across ETRM modules to ensure reporting consistency.
4. Deploy a **configurable tax rule engine** that enables dynamic updates to jurisdiction-specific logic without code changes or IT dependency.
5. Establish **audit-ready traceability** by logging all tax-relevant transactions, overrides, and rule changes with timestamps and user-level detail.

4.2 Goals

1. Automatically extract and consolidate **90% of tax-relevant data** into centralized reports, reducing manual prep time from 2 days to under 2 hours per month within 3 months.
2. Enforce **100% validation rules** for tax-relevant fields at time of trade or shipment entry, targeting a **50% reduction** in rework due to data issues within 3 months.
3. Align **100% of master data** used in tax logic across trade and logistics modules, with a quarterly governance review process in place within 3 months.
4. Implement a rules engine allowing tax analysts to update **80% of logic without IT**, cutting change turnaround time from 2 weeks to 2 days, within 2 months.
5. Ensure that **100% of tax rule changes and override actions** are logged with user-level traceability and available for export on demand, within 2 months.

4.3 Strategic Alignment

| Strategic Goal | Key Action | Measurable Impact | Project Deliverable |
|--|---|---|---|
| Improve operational efficiency through automation | Eliminate manual compilation and reconciliation of tax data | Reduce monthly tax reporting prep time from 2 days to under 2 hours (90% automation rate) | Automated generation of monthly indirect tax reports using ETRM data |
| Strengthen compliance and risk management | Standardize processes, improve traceability, and enforce validation at source | 100% of tax actions logged with audit-ready traceability; 50% reduction in rework | Full audit logs of tax calculations, override tracking, and compliance validation workflows |
| Enable scalability and agility in response to regulatory changes | Deploy configurable, user-managed rule engine for tax logic | 80% of tax logic changes completed without IT involvement; change turnaround reduced from 2 weeks to 2 days | Rule engine with UI for tax analysts to manage jurisdiction-specific indirect tax logic |
| Enhance data integrity and reporting accuracy across systems | Align and govern tax-relevant master data across modules | 100% alignment of key tax master data; Quarterly governance reviews in place | Centralized data mapping for product codes, regions, and tax fields across ETRM modules |
| Increase responsiveness to market and regulatory changes | Enable real-time validation and dynamic rule updates | 100% validation of tax-relevant fields at entry; rule updates deployed in days instead of weeks | Real-time validation engine integrated into trade capture and logistics modules |

4.4 KPIs and Success Metrics

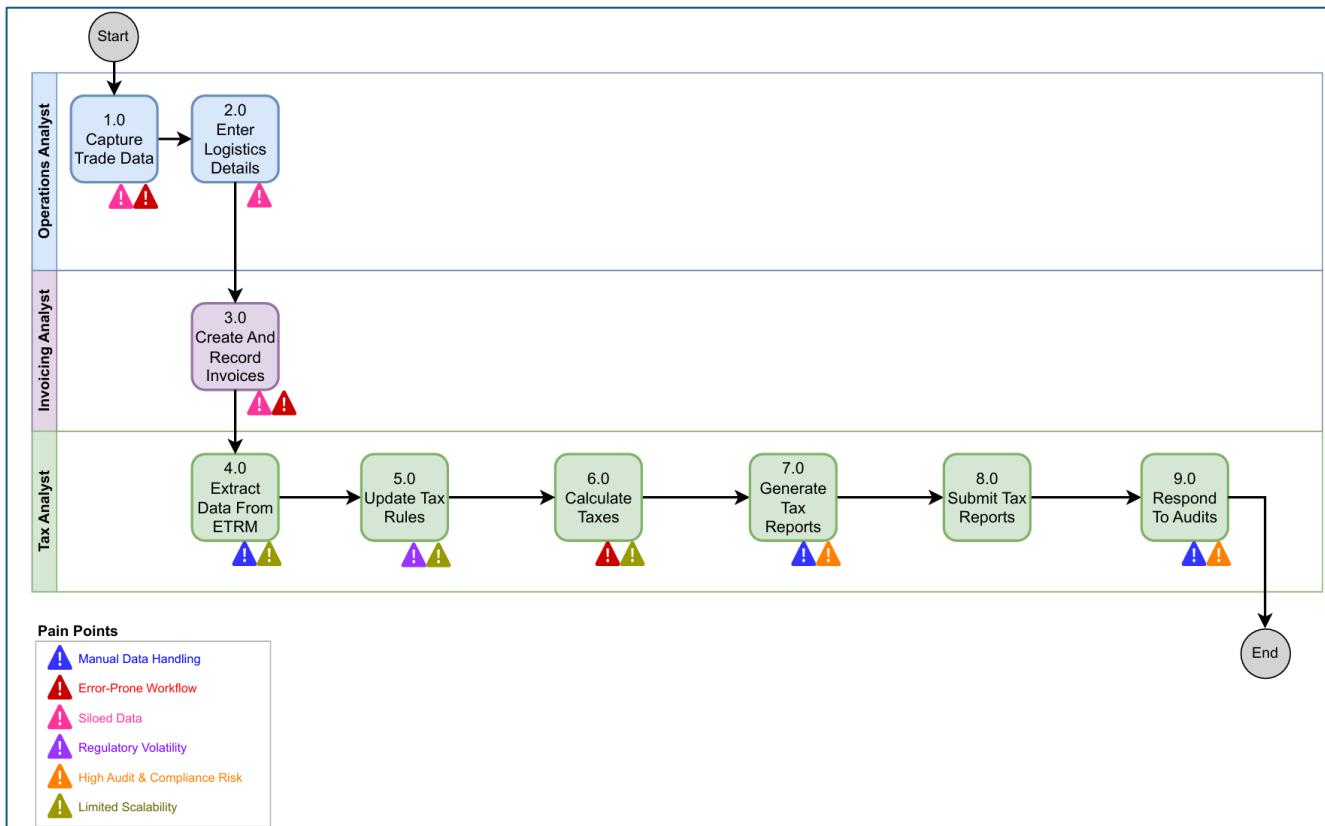
The following metrics will be used to measure success:

| KPI / Metric | Description | Target / Goal |
|--|---|---|
| Manual Effort Reduction | Measures the decrease in time spent manually compiling and reconciling tax reports | <input type="button" value="↓"/> Reduce from 16 hours/month to <2 hours/month (90% reduction) |
| Automation Coverage Rate | Percentage of monthly tax reports generated automatically | <input checked="" type="checkbox"/> 90%+ of reports auto-generated using ETRM data |
| Error Rate in Tax Reports | Frequency of inaccuracies found in tax submissions or audit findings | <input type="button" value="↓"/> Decrease errors by 50% |
| Validation Rule Enforcement Rate | Share of transactions that pass real-time tax validation checks at point of entry | <input checked="" type="checkbox"/> 100% of tax-relevant transactions validated |
| Master Data Alignment Accuracy | Percentage of aligned and governed master data used across tax logic (e.g., product codes, regions) | <input checked="" type="checkbox"/> 100% alignment with quarterly governance reviews |
| Audit Traceability Coverage | Proportion of tax calculations, overrides, and logic changes logged with audit trail | <input checked="" type="checkbox"/> 100% traceability with timestamp and user-level detail |
| Turnaround Time for Tax Logic Changes | Time required to update jurisdiction-specific tax logic | <input type="button" value="↓"/> Reduced from 2 weeks to 2 days |
| IT Dependency Rate for Rule Changes | Share of tax logic updates made by business users without IT support | <input checked="" type="checkbox"/> 80% of changes completed by tax analysts |
| Compliance Incidents / Penalties | Number of audit findings, late filings, or penalties related to indirect tax | <input type="button" value="↓"/> Zero compliance issues post-implementation |
| User Adoption and Satisfaction (Tax Team) | Qualitative and quantitative feedback on usability and value of new tools | <input checked="" type="checkbox"/> ★ 85%+ satisfaction in post-implementation survey |

5. Current State Analysis

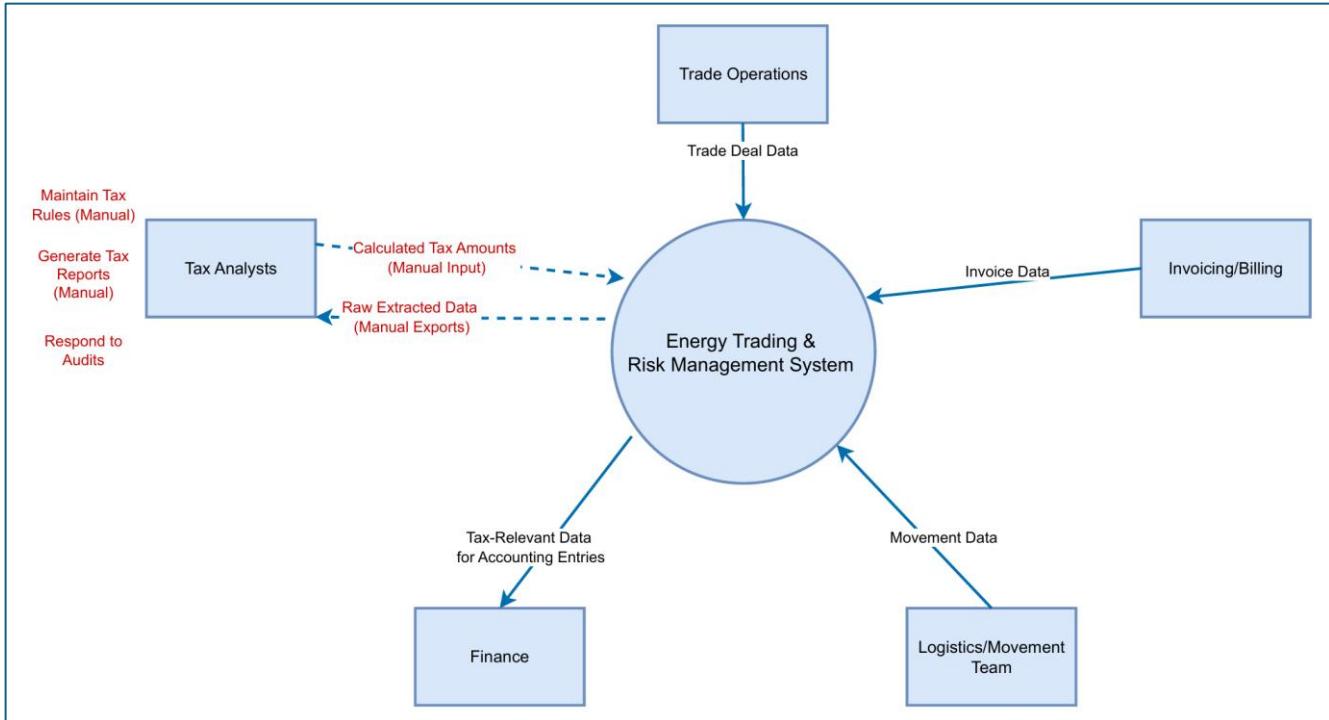
The current process depends on manual ETRM data extraction, spreadsheet-based tax calculations, and rule updates managed by a few SMEs. This creates risks of errors, delays, inconsistent tax application, and limited scalability, while making audit and compliance tracking time-consuming.

5.1 High Level Process Flow (Current State)



5.2 Context Model (Current State)

ETRM receives trade, logistics, and invoice data. Tax SMEs **manually** calculate taxes from ETRM exports, update ETRM with results, and send compliance reports to regulators. Finance uses processed tax data from ETRM for accounting.



6. Proposed Solution

6.1 High Level Solution Overview

Recommended Solution: External Low-Code Tax Rules Engine Integrated with ETRM

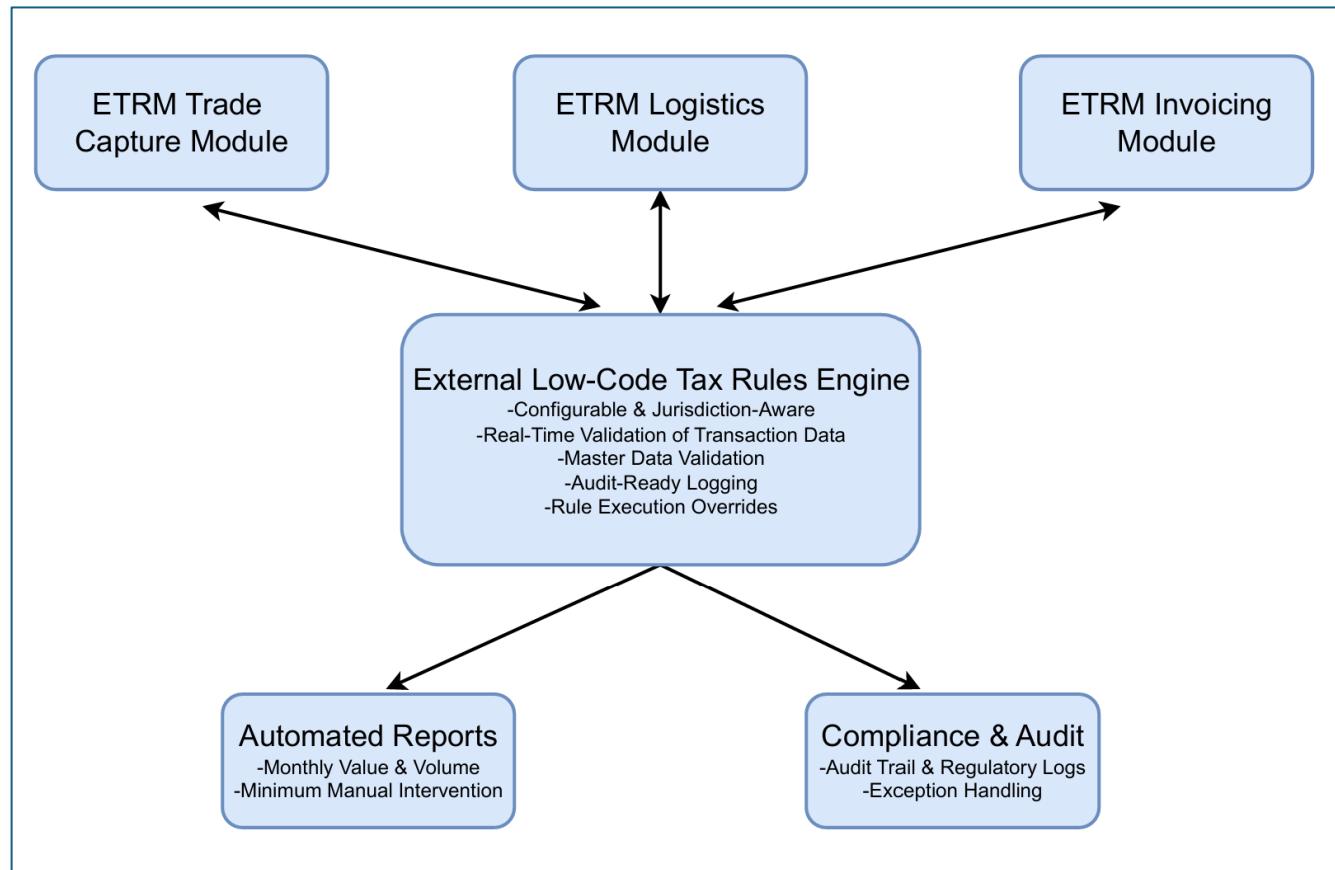
Implement a configurable, jurisdiction-aware rules engine (such as Drools, OpenRules, or a custom-built low-code solution) that sits outside the ETRM system but is integrated via data interfaces or APIs. This engine interprets tax rules, performs validations, logs actions, and outputs reporting-ready data for compliance.

6.2 High Level Solution Diagram

The solution connects the ETRM system to an external low-code tax rules engine that applies jurisdiction-specific tax logic, validates data, and calculates tax amounts in real time.

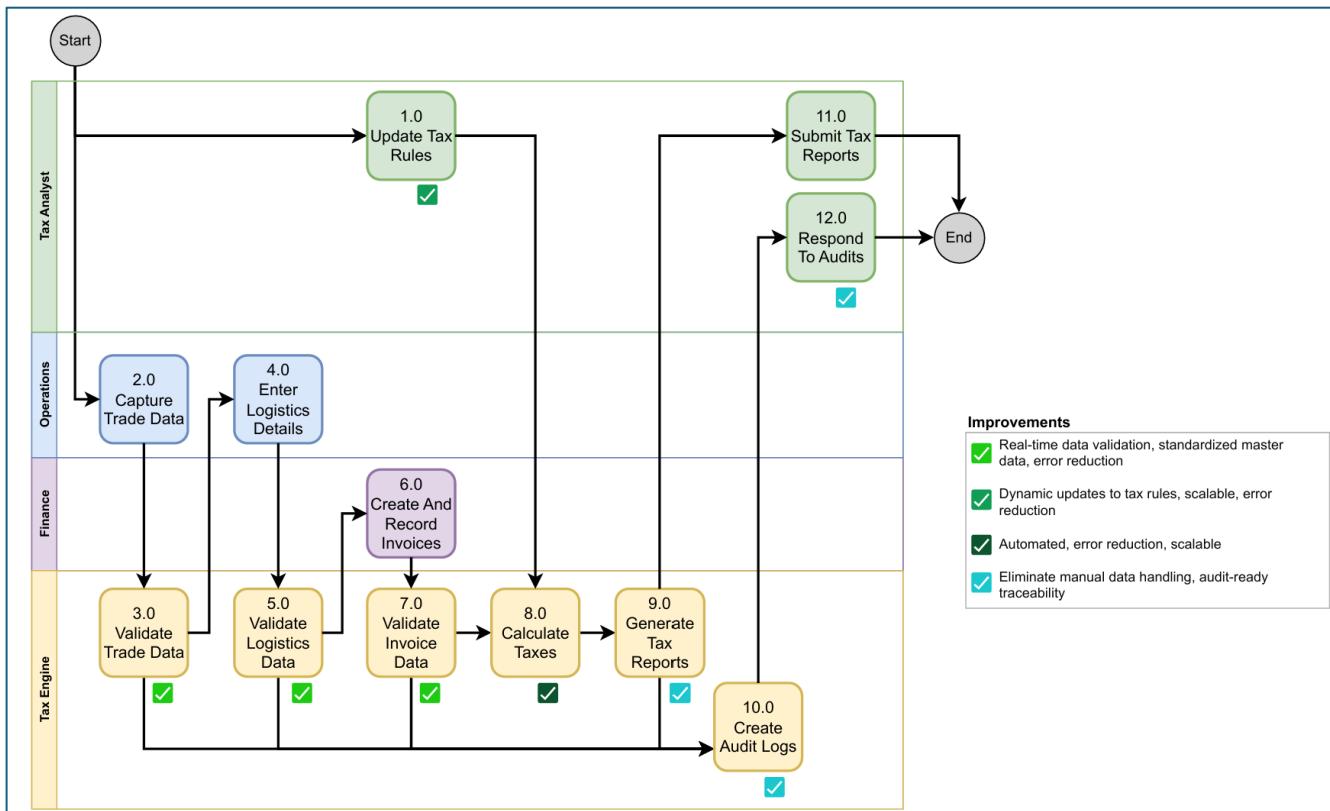
Validated results flow back to the ETRM for operational accuracy, while the engine also generates compliance-ready reports and detailed audit logs.

This bi-directional integration improves data quality, reduces manual effort, and ensures regulatory transparency.



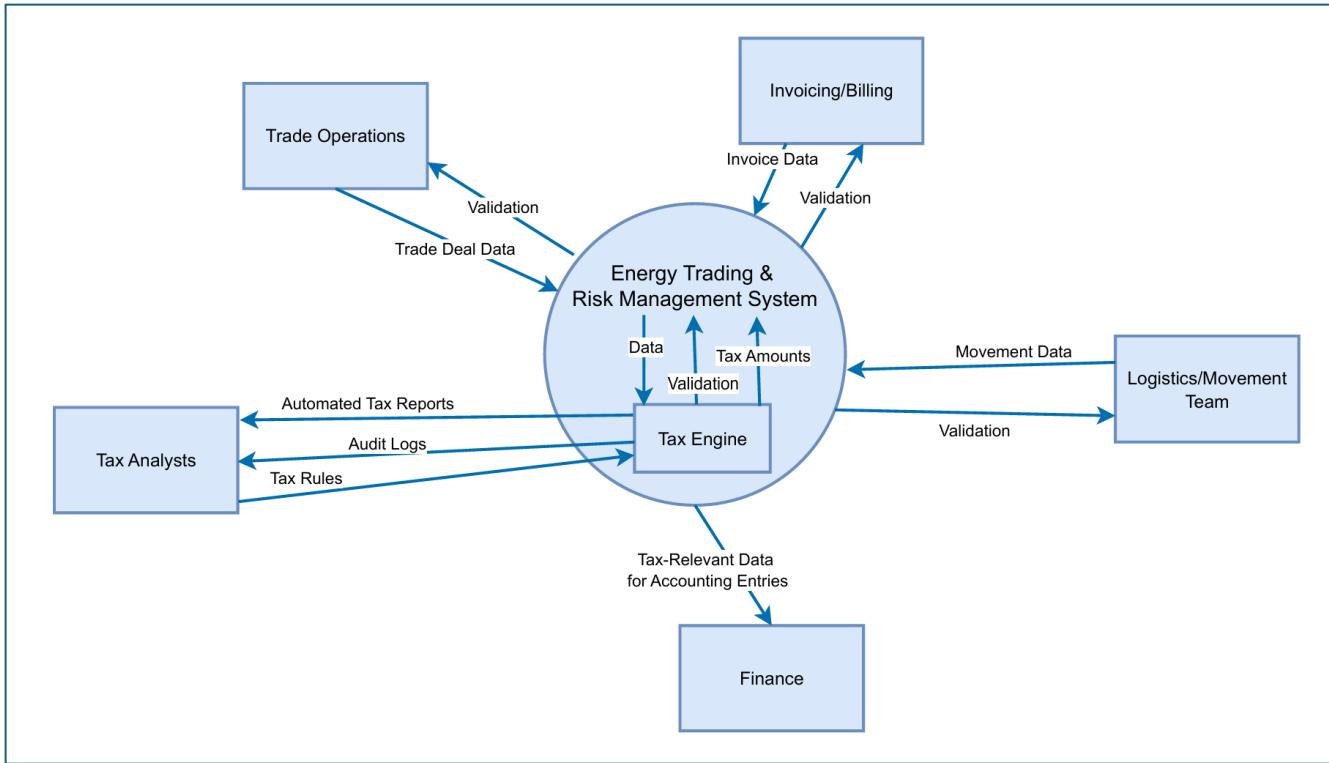
6.3 High Level Process Flow (Future State)

The future state introduces a centralized Tax Engine that validates trade, logistics, and invoice data in real time, reducing errors and rework. Parallel rule maintenance allows tax analysts to update and deploy rules without IT, ensuring rapid response to regulatory changes. Automated audit logs, standardized master data, and report generation improve efficiency, compliance, and traceability across the entire process.



6.4 Context Model (Future State)

ETRM with Tax Engine automates tax calculations and updates data automatically. Tax SMEs now focus on review and manually sending compliance reports. Processing is faster, more accurate, and less error-prone than before.



6.5 How it Meets Objectives

| Objective | How the Solution Supports It |
|--|---|
| Implement a configurable rule engine for jurisdiction-specific indirect tax logic | The external engine is purpose-built for flexibility. Rules can be updated without code changes and customized by jurisdiction, product type, or transaction type, ensuring accurate logic despite frequent tax rule changes. |
| Enable real-time validation of product volume, trade price, and tax-relevant data | The engine can be triggered at key transaction events (e.g., trade entry, movement creation, invoice generation) to validate data inputs, alert on mismatches, and prevent bad data from propagating. |
| Automate generation of monthly value and volume-based reports from trade, movement, and invoicing modules | By consuming transaction data from multiple modules, applying consistent rules, and outputting structured results, the engine enables automated report generation with minimal manual intervention. |
| Create audit-ready logs of all tax calculations and overrides | Every rule execution is logged, including input parameters, results, and any overrides or exceptions. This audit trail satisfies regulatory requirements and internal compliance needs. |
| Validate master data mappings (e.g., product codes, jurisdiction tags) for reporting consistency | Master data lookups can be embedded within the engine to flag unmapped or invalid records, ensuring consistency before data reaches reporting layers. |

6.6 Tool Selection Status

The preferred approach is to implement an external low-code tax rules engine, with Drools and OpenRules identified as potential vendors, alongside the possibility of a custom-built solution if justified. The final tool has not yet been selected.

A formal vendor evaluation process, potentially including an RFP, will be conducted to assess fit, cost, support, and integration capabilities. The solution is expected to be a SaaS or on-premise product based on organizational IT policies and scalability requirements. This evaluation will occur during the initial project phases prior to procurement and implementation.

7. Options Considered

| Option | Description | How It Supports Objectives | Risks / Challenges |
|--|--|---|---|
| 1. Custom Tax Rules Engine within the ETRM | Build a configurable rules engine directly inside the existing ETRM platform. | <ul style="list-style-type: none"> • Enables real-time validation • Automates reporting within ETRM • Supports audit logging and master data validation natively | <ul style="list-style-type: none"> • High development and maintenance effort • Potential impact on ETRM upgrades • Longer implementation timeline |
| 2. External Low-Code Tax Rules Engine Integrated with ETRM <input checked="" type="checkbox"/> Recommended | Use a scalable, external engine (e.g., Drools) connected via APIs or data pipelines. | <ul style="list-style-type: none"> • Supports flexible and jurisdiction-specific tax logic • Enables real-time validation and automated reporting • Centralizes rule management with audit-ready logs • Validates master data mappings externally | <ul style="list-style-type: none"> • Requires robust integration setup • May require new governance for rule changes • Needs stakeholder alignment across platforms |
| 3. BI/ETL-Based Reporting with Manual Rule Application | Extract data to a BI tool, apply tax logic manually or via scripts/spreadsheet s, then generate reports. | <ul style="list-style-type: none"> • Can produce value/volume reports quickly • May partially validate master data • Low initial cost | <ul style="list-style-type: none"> • No real-time validation • Prone to human error • Limited audit trail • Doesn't scale well with complexity or change |
| 4. Do Nothing | Continue using existing manual processes, spreadsheets, and ad hoc BI tools for reporting. | <ul style="list-style-type: none"> • No upfront investment • Business continues using familiar tools and processes | <ul style="list-style-type: none"> • Ongoing inefficiencies and manual workarounds • Higher risk of compliance errors or late filings • No real-time validation or audit traceability • Growing complexity may exceed current capabilities • Costs continue as hidden inefficiencies and fire drills |

8. Scope

8.1 In Scope

| Category | Scope Items |
|-----------------------------|---|
| Tax Rule Engine | Configurable rule engine; exemption handling; volume/value thresholds |
| Monthly Tax Reports | Automated jurisdiction-specific tax report generation |
| Real-Time Validation | Real-time checks across trade, movement, invoicing data |
| Audit-Ready Logging | Role-based audit trails and override logging |
| Master Data Mapping | Validation of core tax master data inputs |

8.2 Out of Scope

| Category | Deferred Items |
|---|--|
| Direct Filing or Submission to Tax Authorities | This project focuses on internal tax report generation, not on electronic filing or integration with government portals. |
| Full Global Rollout to All Jurisdictions | Release 1 will focus on <u>one</u> jurisdiction for a controlled pilot. Global expansion may be scoped in future phases. |
| Changes to Core Trade, Logistics, or Invoicing Workflows | We will read and validate data from these modules, but not redesign or alter their business processes. |
| Migration of Historical Tax Data | Only current and future transactions will be handled. Historical data cleanup or migration is deferred. |
| Exception Handling Workflow | Approval routing for overrides or flagged records |
| Rule Simulation Tools | Strategic forecasting or tax modeling capabilities |

9. Stakeholder Analysis

Identifies key stakeholders, their roles, and their interest in the project. This ensures proper communication, alignment, and engagement throughout the project lifecycle.

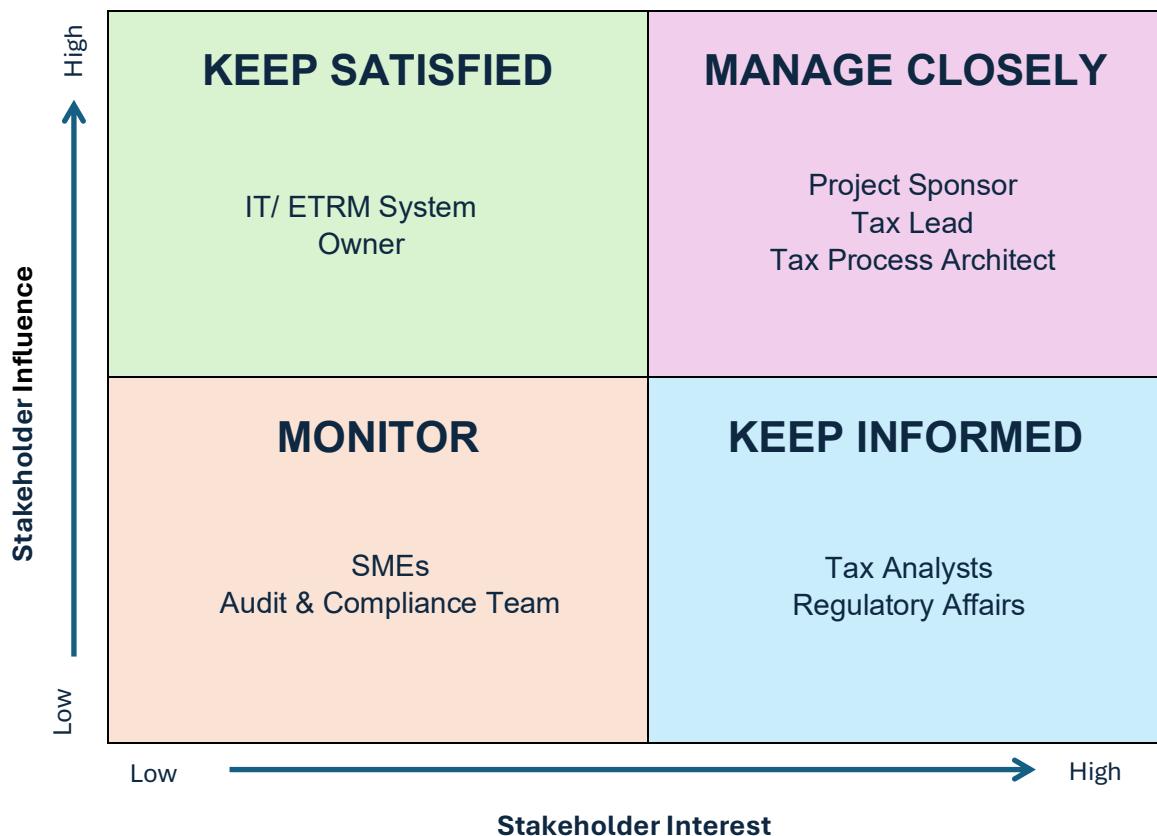
9.1 Stakeholder Register

This identifies and documents all stakeholders involved or impacted.

| Stakeholder | Role / Interest | Influence | Interest | Communication Strategy |
|------------------------------------|--|-----------|----------|--|
| Tax Lead | Owns tax reporting outcomes; wants automation, accuracy, auditability, and compliance | 1-High | 1-High | Weekly status updates, participate in UAT, input on rule engine, report format validation |
| Project Sponsor | Provides funding and strategic direction; ensures alignment to company goals | 1-High | 1-High | Executive briefings at initiation, go/no-go gates, and final outcome review |
| Tax Process Architect | Designs future-state tax process; focuses on scalability, governance, and cross-system alignment; ensures tax rules are applied consistently and accurately across modules | 1-High | 1-High | Key design workshops, owns the tax operating model, validates solution architecture |
| IT / ETRM System Owner | Ensures integration into trade, movement, and invoicing systems; owns technical feasibility | 1-High | 2-Medium | Bi-weekly working sessions, technical design reviews, risk mitigation planning |
| Tax Analysts (End Users) | Use system for filings; interested in reduced manual workload and clarity of rule logic; need accurate, timely reports | 2-Medium | 1-High | Pilot testing, hands-on feedback sessions, training pre-implementation |
| Regulatory Affairs | Oversees financial compliance and regulatory integrity of tax reporting | 2-Medium | 1-High | Monthly executive summaries, milestone-based decision reviews |
| Trade Operations SME | Provides insight into trade capture logic and transaction workflows impacting tax treatment / Data Source Owners | 2-Medium | 2-Medium | Requirement workshops, validation of trade data handling rules |
| Logistics Team SME | Ensures accuracy of volume/movement data tied to product delivery and tax liability | 2-Medium | 2-Medium | Requirement workshops, testing validation rules related to shipments and quantities |
| Invoicing SME | Ensures invoicing workflows align with tax reporting needs; validates data accuracy for invoice-related tax rules | 2-Medium | 2-Medium | Requirement workshops, invoice data validation sessions, feedback during UAT |
| Audit & Compliance Team | Ensures traceability and transparency for audit readiness | 2-Medium | 2-Medium | Monthly review checkpoints, access to audit logs and sample reporting |

9.2 Stakeholder Map

To analyze stakeholders based on power and interest and determine how to engage them.



9.3 RACI Matrix

To define stakeholder roles and responsibilities for tasks or decisions.

| Task / Deliverable | Project Manager | Business Analyst | Design Lead | Developer | Business Sponsor | Tax Lead | Tax Process Architect | SMEs | Tax Analysts (Users) |
|-------------------------------------|-----------------|------------------|-------------|-----------|------------------|----------|-----------------------|------|----------------------|
| Define project scope & objectives | A | R | | | R | C | C | C | |
| Business case development | A | R | | | R | C | C | C | |
| Requirements gathering | A | R | I | I | I | C | C | C | C |
| Solution design & architecture | A | C | R | C | I | C | C | C | C |
| Develop tax rules engine | I | C | A | R | I | C | C | C | I |
| Integration with ETRM | I | C | R | R | I | C | C | C | I |
| Master data validation | A | C | C | C | I | R | C | R | C |
| Build tax reports | I | C | A | R | I | C | C | C | I |
| Unit testing | I | C | A | R | I | C | C | C | I |
| System & integration testing | A | R | C | C | I | C | C | C | C |
| User acceptance testing (UAT) | A | C | C | C | I | R | C | C | R |
| User training | A | R | C | C | I | C | C | C | C |
| Go-live planning | A | R | C | R | I | R | C | C | C |
| Go-live execution | A | C | R | R | I | C | C | C | C |
| Post go-live monitoring / Hypercare | A | C | C | R | I | C | C | C | C |

KEY: A Accountable R Responsible C Consulted I Informed

10. Risk Analysis

10.1 Risk Assessment

| ID | Description | Impact | Mitigation Strategy |
|----|--|---|---|
| R1 | Data Quality and Integrity Issues: Inconsistent or incomplete master data across systems (e.g., product codes, jurisdiction tags) could lead to incorrect tax outputs. | Inaccurate tax filings, audit exposure, manual rework, and reputational damage. | Conduct data profiling early. Establish data ownership and governance. Validate mappings through test cycles before go-live. |
| R2 | Incomplete Business Requirements: Failure to capture all jurisdiction-specific tax rules or edge cases. | Missing tax scenarios in rule engine logic; continued manual intervention. | Facilitate cross-functional workshops. Use traceability matrix to confirm full coverage. Review historical audit issues to inform requirements. |
| R3 | Resistance to Change / Low Adoption: Users may distrust the new solution or prefer manual processes. | Low utilization of the new system, poor ROI, persistent inefficiencies. | Involve users early in design and testing. Provide training and hands-on demos. Communicate clear benefits (e.g., time saved). |
| R4 | Over-Reliance on IT or Vendors: Rule engine updates still require technical involvement. | Slow response to regulatory changes, increased costs, reduced agility. | Select a tool with no-code/low-code capability. Ensure business users are trained to manage rules. Set clear handover and support protocols. |
| R5 | Integration Complexity with ETRM: Difficulty accessing and aligning data across trade, movement, and invoicing modules. | Project delays, budget overruns, reduced data reliability. | Engage technical SMEs early. Define data contracts and APIs up front. Prototype integrations in parallel with design. |

10.2 Assumptions

| ID | Description |
|----|---|
| A1 | ETRM modules contain complete trade and movement data for report generation |
| A2 | Tax rules by jurisdiction are documented and agreed across Legal, Regulatory, and Tax |
| A3 | Business users will be trained on new dashboard and validation logic |
| A4 | Rule maintenance will be governed jointly by Tax Process Architect and IT |

10.3 Constraints

| ID | Description |
|----|--|
| C1 | ETRM vendor limits may restrict customization of UI or dashboard widgets |
| C2 | Rule logic complexity may require phased configuration updates |
| C3 | Project resources are limited to core tax team and ETRM support staff |
| C4 | Sandbox environment may not be available in time for final UA |

10.4 Issues

| ID | Description | Impact | Resolution Approach |
|----|---|-------------------------------------|--|
| I1 | Discrepancy in tax rule interpretation across teams | Delay in rule finalization | Cross-functional rule mapping workshops |
| I2 | Inconsistent volume data from logistics | Late filings, manual reconciliation | Standardize movement field requirements |
| I3 | Lack of override visibility | Audit complications | Log justification metadata with role and timestamp |

11. Cost Benefit Analysis

11.1 Expected Benefits

| Category | Benefit | Why It Matters |
|------------------------------|---|--|
| Efficiency Gains | Automates monthly tax reporting, reducing manual effort by up to 90%. | Frees up tax analysts' time for higher-value tasks like analysis and exception handling. |
| Error Reduction | Real-time validation ensures accurate data entry and compliance with tax rules. | Lowers the risk of filing errors, penalties, and rework. |
| Audit Readiness | Every transaction, override, and rule change is logged with user traceability. | Improves transparency, supports internal controls, and simplifies audits. |
| Regulatory Compliance | Rule engine supports rapid updates to jurisdiction-specific logic without IT dependency. | Enables fast, compliant responses to tax law changes across multiple geographies. |
| Standardization | Unified data across ETRM modules ensures consistent tax calculations and reporting. | Reduces discrepancies and simplifies reconciliation across systems. |
| Scalability | System no longer reliant on institutional knowledge; processes are systematized and repeatable. | Supports future business growth, acquisitions, or expansion into new regions. |
| Cost Savings | Reduces time spent on manual tasks, errors, and audit prep — cutting operational costs. | Achieves long-term savings on labor, penalties, and external audit support. |
| Business Agility | Analysts can adjust tax logic without waiting for IT releases. | Accelerates response time to new business scenarios and jurisdictional requirements. |

11.2 Expected Disbenefits

| Disbenefit | Description / Why It Matters | Mitigation Approach |
|---|--|--|
| Initial Productivity Dip | During implementation and changeover, tax analysts may experience slower workflows as they learn the new system. | Provide hands-on training, shadowing, and phased adoption support. |
| Change Resistance | Stakeholders accustomed to manual methods may resist transitioning to automated and rule-based processes. | Engage users early, gather feedback, and involve SMEs in design decisions. |
| Loss of Institutional Knowledge Reliance | As automation increases, informal knowledge that is undocumented may become obsolete or lost. | Capture and document SME knowledge in system rules, validation logic, and SOPs. |
| Upfront Investment in Time and Resources | Requires significant time from IT, business, and tax teams for design, testing, and data mapping. | Clearly prioritize scope, align on timelines, and ensure executive sponsorship. |
| Complex Configuration Management | The rule engine could become difficult to manage or troubleshoot without clear governance. | Establish ownership model, rule change control process, and regular reviews. |
| Opportunity Cost of Inaction | Continuing manual processes increases risk of penalties, reduces scalability, and drives inefficiencies over time. | Emphasize the long-term strategic benefits of automation in executive communications and project prioritization. |

11.3 Cost

The budget for one-jurisdiction implementation is \$800,000 USD. See the breakdown below.

| Cost Category | Description | Estimated Cost (USD) |
|---|--|----------------------|
| Project Team Resources | Internal time for BA, PM, SMEs, QA, data analysts (partial allocation) | \$150,000.00 |
| IT Development & Integration | System configuration, rules engine setup, ETRM integration (internal + external dev) | \$250,000.00 |
| Software / Tools | Rule engine platform (license or build), reporting tool configuration | \$120,000.00 |
| Data & Master Mapping | Cleansing, aligning, and validating product, tax, and jurisdiction master data | \$45,000.00 |
| Testing & QA | Functional, user acceptance, and regression testing cycles | \$50,000.00 |
| Training & Change Mgmt | End-user training, stakeholder communications, documentation | \$30,000.00 |
| Post-Go-Live Support | Hypercare period, monitoring, early issue triage | \$50,000.00 |
| Contingency | Risk buffer for scope changes, delays, additional support (approx. 15%) | \$105,000.00 |
| | | \$800,000.00 |

Notes

- Estimates assume use of an existing ETRM system (e.g., Endur, SAP, Allegro) with customization.
- Costs scale significantly when adding multiple jurisdictions or real-time global compliance features.
- Licensing and integration costs may be lower if internal platforms can be reused or extended.

12. Financial Analysis

12.1 Summary Table

Give a high-level view of the investment and return:

| Metric | Value (USD) |
|--------------------------|-----------------------|
| Estimated Project Cost | \$800,000 |
| Annual Savings (Year 1) | \$500,000 – \$750,000 |
| Annual Savings (Year 2+) | \$750,000 – \$900,000 |
| Payback Period | ~1–1.5 years |
| 3-Year Net Savings | \$1.5M – \$1.9M |
| ROI (3-Year) | 187% – 238% |

12.2 Quantifiable Benefits

Estimate time, cost, or revenue improvements this project delivers.

| Benefit | Type | Annual Value (USD) | Notes |
|--|--------------|-----------------------|---|
| Reduced manual reporting labor | Cost Savings | \$200,000 | FTEs redeployed from manual work to higher-value tasks |
| Fewer tax penalties due to improved compliance | Cost Avoided | \$100,000 – \$200,000 | Historical average audit penalty risk |
| Faster tax logic updates (less reliance on IT) | Cost Savings | \$50,000 – \$100,000 | Lower IT support costs |
| Reduced rework due to early validation | Cost Savings | \$75,000 – \$150,000 | Based on historical correction cycles |
| Shorter monthly reporting cycle | Cost Savings | \$50,000 | Value of earlier decision-making and improved cash flow |
| Improved audit traceability | Risk Avoided | Qualitative | Harder to quantify, but reduces reputational and financial risk |

12.3 Cost Estimate Recap

- Total one-time implementation: \$800,000 (avg of range)
- Ongoing maintenance and support: \$50,000/year (*e.g., minor IT tweaks, rule updates*)

12.4 ROI Calculation

Basic ROI formula for a 3-year view:

- $\text{ROI} = (\text{Total Net Benefits} - \text{Total Costs}) / \text{Total Costs} \times 100$

Results:

- Net benefit over 3 years: \$2.2M savings - \$800K cost = \$1.4M
- $\text{ROI} = (\$1.4M / \$800K) \times 100 = 175\%$

12.5 Conclusion

This solution is projected to pay for itself in under 2 years, while delivering measurable operational efficiencies, reducing compliance risk, and enabling scalable tax reporting as the business grows.

13. Governance Plan

13.1 Governance Structure

The project will be overseen by a **Steering Committee** composed of key business and IT leaders, including the Project Sponsor, Tax Lead, IT/ETRM System Owner, and Regulatory Affairs representative. This committee will provide strategic direction, approve major deliverables, and resolve escalated issues.

A **Project Management Team**, led by the Project Manager and supported by the Business Analyst and Solution Architect, will manage day-to-day execution, track progress, and coordinate stakeholder engagement.

13.2 Roles and Responsibilities

| Role | Responsibility Related to Governance |
|------------------------|--|
| Project Sponsor | Provides funding and strategic direction; approves key decisions and changes. |
| Steering Committee | Approves project milestones, reviews risks and issues, ensures alignment with company goals. |
| Project Manager | Manages project execution, reporting, risk escalation, and meeting facilitation. |
| Business Analyst | Facilitates requirements gathering, stakeholder communication, and supports decision-making. |
| IT / ETRM System Owner | Oversees technical feasibility, integration decisions, and validates architecture. |
| Tax Lead | Owns tax reporting outcomes and rules; ensures solution meets business needs. |

13.3 Decision-Making Process

Decisions on scope changes, budget adjustments, and key deliverables require Steering Committee approval, typically during monthly governance meetings. The Project Manager is responsible for escalating unresolved issues to the committee promptly. Decisions will be made by consensus or, if needed, final approval by the Project Sponsor.

13.4 Meeting Cadence and Reporting

- **Steering Committee Meetings:** Monthly, to review project status, risks, issues, and approve phase gates.
- **Project Team Meetings:** Weekly, for progress updates, task coordination, and risk monitoring.
- **Ad hoc Technical or Design Reviews:** Scheduled as needed to address integration or architecture concerns.

The Project Manager will distribute weekly status reports to key stakeholders, including updates on milestones, risks, and resource allocation.

13.5 Escalation Process

Issues or risks that cannot be resolved within the project team will be escalated to the Steering Committee via the Project Manager. Urgent matters impacting schedule, cost, or compliance must be communicated immediately to the Project Sponsor and Steering Committee Chair.

14. Implementation Plan

This section outlines how the selected solution, an External Low-Code Tax Rules Engine Integrated with the ETRM system, will be implemented. The rollout follows a phased, 12-month hybrid delivery model that balances structured planning with agile flexibility for rule development and testing. The plan emphasizes stakeholder engagement, robust testing, and a full hyper care period to ensure long-term success.

14.1 Delivery Approach

- **Hybrid:** Waterfall for planning, governance, and go-live; Agile sprints for requirements, design, build, and testing.
- **Phased Implementation:** Includes a full-scope pilot, production release, and post-launch stabilization.

14.2 Phases, Milestones & Deliverables

| Phase | Timeline | Milestones & Deliverables |
|------------------------------|----------------|--|
| 1. Initiation & Planning | Month 1 | <ul style="list-style-type: none">• Project charter and business case finalized• Stakeholders, RACI, KPIs defined• Solution option approved |
| 2. Requirements & HLD | Months 2–3 | <ul style="list-style-type: none">• Use cases and tax rules gathered from tax, trade ops, and logistics SMEs• High-level architecture• Future-state process maps |
| 3. Detailed Design & Setup | Month 4 | <ul style="list-style-type: none">• Finalized data mappings• Integration specifications• Prototypes for complex rule logic |
| 4. Build (Full Tax Rules) | Months 5–7 | <ul style="list-style-type: none">• All tax rules configured for the jurisdiction• Integration with ETRM and reporting system• Audit logging in place |
| 5. Testing & Validation | Months 8–10 | <ul style="list-style-type: none">• Functional testing of complete rule logic• UAT with SME signoff• Finalized reporting outputs and validations |
| 6. Training & Go-Live Prep | Month 11 | <ul style="list-style-type: none">• User training delivered• Final documentation completed• Cutover and go-live checklist ready |
| 7. Go-Live | Month 11 (end) | <ul style="list-style-type: none">• Deployment to production• Production access and support team on standby |
| 8. Hypercare & Stabilization | Month 12 | <ul style="list-style-type: none">• Monthly report cycle monitored• Critical issues resolved• Project retrospective and close-out |

Why This Timeline Works for a Critical Project

- Complex rule logic needs time to iterate and validate
- Monthly reports require time to observe across full cycles
- Hypercare captures real-world usage and exceptions
- Supports audit trail validation and compliance alignment
- Cross-team approvals can take weeks
- ETRM integration requires 2–3 months for build and test
- SME availability is limited due to other responsibilities

14.3 Releases & Rollout Structure

| Release | Scope |
|----------------------------|--|
| Pilot (Build Phase) | Full tax rule coverage for one jurisdiction; includes all scenarios required for compliance and operational accuracy |
| Release 1 (Go-Live) | Finalized implementation with monitoring and stakeholder handoff to operational teams |
| Post-Launch (Hypercare) | Monitor monthly cycles, resolve issues, and finalize recommendations for scaling to other jurisdictions |

14.4 Resources Required

| Resource Type | Key Roles |
|---|--|
| Business SMEs | Tax, Trade Operations, Logistics, Regulatory Affairs |
| IT Resources | Integration Developer, Data Engineer, ETRM Architect, QA/Testers, Support Engineer |
| Project Team | Project Manager, Business Analyst, Solution Architect, Scrum Master |
| External Vendors (if needed) | Rule Engine Specialists (e.g., Drools consultant), API Integration Consultants |
| Change Management | Training Lead, Communications Lead, User Support Coordinator |

15. Transition Plan to Operations

Following the go-live of the External Low-Code Tax Rules Engine integrated with the ETRM system, a structured support and transition model will ensure operational stability and continuous improvement.

15.1 System Monitoring

The **Tax IT Support Team** will be responsible for ongoing system monitoring, including performance tracking, data accuracy, and audit trail verification. Monitoring tools and dashboards will be employed to detect anomalies proactively and support monthly reporting cycles.

15.2 Rule Changes and Exception Handling

Ownership of tax rule changes will reside with the **Tax Lead**, supported by the Business Analyst and IT Integration Team. A formal change management process will govern rule updates:

- Change requests will be submitted through the company's ticketing system.
- Monthly Change Control Board meetings will prioritize and approve changes based on regulatory requirements and business impact.
- Exception cases detected during monthly reports or audits will be logged, triaged, and resolved following agreed SLAs.

15.3 Post-Go-Live Support

A dedicated **Tax IT Support Resource** will be assigned to provide steady-state support, handling incident resolution, user inquiries, and coordination with external vendors (e.g., rule engine consultants, API integrators). This resource will:

- Operate during core business hours with defined on-call protocols for urgent issues during critical reporting periods.
- Escalate unresolved or high-impact issues to the Project Sponsor and Steering Committee as needed.
- Facilitate knowledge transfer and documentation updates to support continuous improvement.

15.4 Knowledge Transfer and Documentation

Prior to project closure, comprehensive knowledge transfer sessions will be conducted for support teams and end users. Updated system documentation, user guides, and support procedures will be maintained in a centralized repository.

16. Recommendations

After thorough analysis of the current state, solution options, and strategic alignment, we confidently recommend moving forward with the **implementation of an external, low-code configurable tax rules engine** integrated with our existing ETRM system.

This solution offers the most effective balance of flexibility, scalability, compliance assurance, and long-term cost savings. It addresses the core problems of manual effort, error risk, and lack of audit readiness while equipping the Tax team with a future-ready platform that can adapt to jurisdictional complexity and regulatory volatility.

16.1 Summary of Evidence

- **Operational Pain:** Current processes are fragmented, manual, and non-scalable, with high audit risk and rework effort.
- **Financial Case:** 3-year ROI of 187%–238%, with payback within ~12–16 months.
- **Business Impact:**
 - 90% of tax reporting automated
 - 50% reduction in rework
 - 100% audit traceability
 - 80% of tax rule changes managed without IT
- **Stakeholder Support:** Tax, IT, and business SMEs engaged and aligned on solution viability and value.
- **Implementation Plan:** A realistic 12-month hybrid delivery model has been defined, with a full-scope pilot for one jurisdiction.

16.2 Next Steps

1. **Finalize Executive Approval** of business case and funding.
2. **Confirm Tool Selection** (e.g., Drools or preferred platform) via procurement or internal IT review. Define requirements, issue RFP if needed, and evaluate vendor solutions including Drools, OpenRules, and custom-built options. Determine deployment model (SaaS vs. on-premise) in collaboration with IT architecture teams.
3. **Mobilize Project Team:** Assign roles, confirm availability, and initiate project kickoff activities.
4. **Begin Phase 1: Planning & Requirements** - target start within 4–6 weeks of approval.

16.3 Approval Requirements

To proceed, the following approvals are required:

- **Business Sponsor sign-off** on funding and resource commitment.
- **IT Architecture sign-off** on solution alignment and integration approach.
- **Tax Leadership sign-off** on scope, rule ownership model, and SME participation.