# Simply Solar Solutions - Task Dependencies & Workflow

## Project Workflow Overview

\*\*Execution Strategy\*\*: Hybrid (Parallel research phases + Sequential content creation)

\*\*Estimated Duration\*\*: 4 weeks comprehensive analysis + ongoing implementation

\*\*Quality Assurance\*\*: Iterative feedback loops integrated throughout

## MANDATORY RESEARCH WORKFLOW - Phase Dependencies

### Phase 1: Foundation Research & Strategic Analysis

\*\*Execution Mode\*\*: Parallel

\*\*Duration\*\*: Week 1

```yaml

sop\_compliance\_check:

agent: brand\_compliance\_auditor

description: Verify brand consistency and existing content standards

duration: 2 days

dependencies: []

audience\_research:

agent: audience\_intent\_researcher

description: Develop 3-7 detailed buyer personas with behavioral analysis

duration: 3 days

dependencies: []

market\_research:

agent: brand\_sentiment\_researcher

description: Current market conditions, opportunities, and challenges analysis

duration: 3 days

dependencies: []

usp\_brand\_analysis:

agent: brand\_analyst

description: USP definition and brand SWOT analysis

duration: 2 days

dependencies: []

competitor\_swot\_analysis:

agent: competitive\_intelligence\_searcher

description: Strategic positioning analysis of top 5 competitors

duration: 3 days

dependencies: []

```

### Phase 2: Competitive Intelligence & Search Landscape

\*\*Execution Mode\*\*: Parallel

\*\*Duration\*\*: Week 1-2

```yaml

brand\_competitor\_positioning:

agent: brand\_strategy\_researcher

description: Brand positioning assessment and competitive differentiation

duration: 2 days

dependencies: [usp\_brand\_analysis]

trending\_topics\_research:

agent: technical\_research\_specialist

description: Current solar industry trends and hot topics identification

duration: 2 days

dependencies: [market\_research]

content\_gap\_analysis:

agent: competitor\_analyzer

description: Missing content opportunities and market gaps identification

duration: 3 days

dependencies: [competitor\_swot\_analysis]

search\_landscape\_analysis:

agent: seo\_strategist

description: Market size, competition levels, seasonal trends, local SEO gaps

duration: 3 days

dependencies: [market\_research]

competitor\_content\_audit:

agent: competitive\_intelligence\_searcher

description: Website analysis, content gaps, mobile experience, user journeys

duration: 4 days

dependencies: [competitor\_swot\_analysis]

```

### Phase 3: Advanced SEO & Keyword Strategy

\*\*Execution Mode\*\*: Parallel

\*\*Duration\*\*: Week 2-3

```yaml

comprehensive\_keyword\_research:

agent: keyword\_researcher

description: SEO keyword identification, search intent analysis, funnel mapping

duration: 4 days

dependencies: [search\_landscape\_analysis, content\_gap\_analysis]

keyword\_gap\_analysis:

agent: seo\_strategist

description: Untapped angle keywords and SEO competitive gaps

duration: 3 days

dependencies: [comprehensive\_keyword\_research, competitor\_content\_audit]

emerging\_trends\_keywords:

agent: technical\_research\_specialist

description: Future-proofing content with trending search terms

duration: 2 days

dependencies: [trending\_topics\_research, comprehensive\_keyword\_research]

```

### Phase 4: Content Planning & AI Optimisation

\*\*Execution Mode\*\*: Parallel

\*\*Duration\*\*: Week 3-4

```yaml

detailed\_content\_briefs:

agent: content\_strategist

description: Page layouts, wireframes, word counts, conversion paths, 12-month calendar

duration: 5 days

dependencies: [comprehensive\_keyword\_research, keyword\_gap\_analysis, audience\_research]

content\_structure\_specifications:

agent: page\_content\_brief\_agent

description: Headlines, sections, CTAs, internal linking strategy

duration: 3 days

dependencies: [detailed\_content\_briefs]

ai\_readiness\_optimisation:

agent: ai\_specialist\_agent

description: AI systems compatibility, voice search, schema markup

duration: 3 days

dependencies: [content\_structure\_specifications]

content\_ideas\_generation:

agent: blog\_ideation\_specialist

description: Creative content ideation based on research foundation

duration: 2 days

dependencies: [detailed\_content\_briefs, emerging\_trends\_keywords]

content\_mapping\_clusters:

agent: content\_strategist

description: Topic clusters and content authority building strategy

duration: 3 days

dependencies: [content\_ideas\_generation, keyword\_gap\_analysis]

```

## ITERATIVE FEEDBACK LOOP INTEGRATION

### Content Quality Assurance Workflow

\*\*Process\*\*: Sequential agent feedback with iterative improvement

\*\*Max Iterations\*\*: 3 per content piece

\*\*Success Criteria\*\*: All thresholds met + aggregate score ≥8.5/10

```yaml

feedback\_loop\_homepage\_content:

type: IterativeImprovement

description: Multi-agent feedback loop for homepage content optimisation

dependencies: [detailed\_content\_briefs, content\_structure\_specifications]

agent\_sequence:

* agent: clarity\_conciseness\_editor

threshold: 8.0

focus: Grammar, spelling, sentence structure, Australian English compliance

* agent: cognitive\_load\_minimizer

threshold: 7.0

focus: Information hierarchy, cognitive complexity reduction, scannability

* agent: content\_critique\_specialist

threshold: 7.0

focus: Argument strengthening, evidence verification, logical consistency

* agent: ai\_text\_naturalizer

threshold: 8.0

focus: AI artifact removal, natural flow, conversational balance

max\_iterations: 3

refinement\_agent: content\_refiner

final\_gate: enhanced\_content\_auditor

feedback\_loop\_service\_pages:

type: IterativeImprovement

description: Service page content optimisation workflow

dependencies: [content\_structure\_specifications, ai\_readiness\_optimisation]

agent\_sequence: [clarity\_conciseness\_editor, cognitive\_load\_minimizer, content\_critique\_specialist, ai\_text\_naturalizer]

max\_iterations: 3

success\_criteria: [individual\_thresholds\_met, aggregate\_score\_8\_5\_plus]

feedback\_loop\_blog\_content:

type: IterativeImprovement

description: Blog content strategy and calendar optimisation

dependencies: [content\_ideas\_generation, content\_mapping\_clusters]

agent\_sequence: [clarity\_conciseness\_editor, cognitive\_load\_minimizer, content\_critique\_specialist, ai\_text\_naturalizer]

max\_iterations: 3

success\_criteria: [individual\_thresholds\_met, aggregate\_score\_8\_5\_plus]

feedback\_loop\_technical\_content:

type: IterativeImprovement

description: Technical analysis and implementation guides

dependencies: [ai\_readiness\_optimisation]

agent\_sequence: [clarity\_conciseness\_editor, cognitive\_load\_minimizer, content\_critique\_specialist, ai\_text\_naturalizer]

max\_iterations: 3

success\_criteria: [individual\_thresholds\_met, aggregate\_score\_8\_5\_plus]

```

## Quality Gates & Success Metrics

### Research Phase Verification Checkpoints

```yaml

phase\_1\_verification:

* sop\_compliance\_completed: Boolean
* audience\_personas\_created: Count >= 3
* market\_analysis\_depth: Score >= 8.0
* usp\_differentiation\_clarity: Score >= 8.5
* swot\_analyses\_comprehensive: Boolean

phase\_2\_verification:

* competitive\_positioning\_mapped: Boolean
* trending\_topics\_identified: Count >= 20
* content\_gaps\_quantified: Count >= 15
* search\_landscape\_analysed: Boolean
* competitor\_audit\_completed: Count >= 5

phase\_3\_verification:

* keyword\_research\_comprehensive: Count >= 100
* funnel\_mapping\_complete: Boolean
* gap\_opportunities\_identified: Count >= 30
* emerging\_trends\_documented: Count >= 15

phase\_4\_verification:

* content\_briefs\_detailed: Boolean
* structure\_specifications\_defined: Boolean
* ai\_optimisation\_implemented: Boolean
* content\_calendar\_12\_months: Boolean
* topic\_clusters\_mapped: Boolean

```

### Feedback Loop Success Criteria

* \*\*Individual Agent Thresholds\*\*: Must be met before proceeding
* \*\*Aggregate Score Target\*\*: ≥8.5/10 for final approval
* \*\*Iteration Limit\*\*: Maximum 3 cycles per content piece
* \*\*Progress Tracking\*\*: Measurable improvement between iterations
* \*\*Escalation Protocol\*\*: Human review after 2 failed improvement cycles

## Risk Mitigation & Contingencies

### Research Phase Risks

* \*\*Data Access Limitations\*\*: Use web scraping tools and public sources
* \*\*Competitor Information Gaps\*\*: Focus on publicly available content and SEO tools
* \*\*Market Data Currency\*\*: Supplement with real-time search trend analysis

### Content Creation Risks

* \*\*Feedback Loop Stalling\*\*: Implement time limits and human escalation
* \*\*Quality Threshold Issues\*\*: Use content\_refiner for targeted improvements
* \*\*Resource Constraints\*\*: Prioritise high-impact content pieces first

### Implementation Risks

* \*\*Technical Integration\*\*: Provide detailed implementation guides
* \*\*Timeline Pressure\*\*: Built-in buffer periods for quality assurance
* \*\*Scope Creep\*\*: Maintain focus on defined deliverables and success metrics

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\*Task Dependencies Created: 2025-09-13\*

\*Project: Simply Solar Solutions Strategic Content Development\*

\*Workflow Type: Comprehensive Research + Iterative Quality Assurance\*