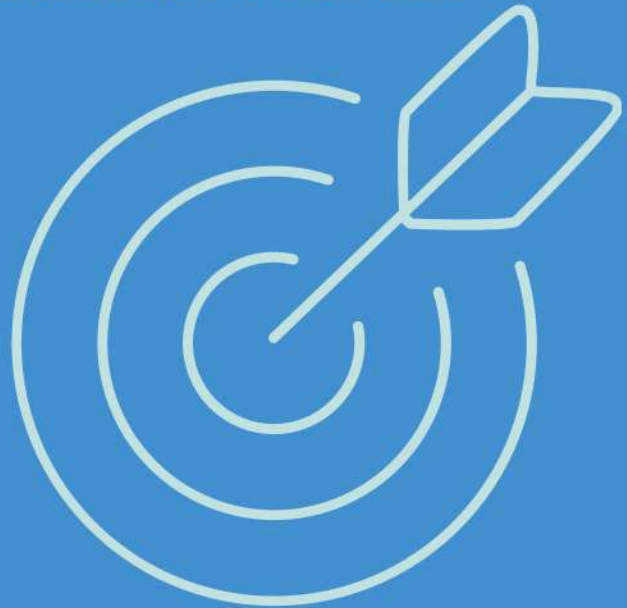


MOVE THE NEEDLE

Goal Planning and Facilitation Guide



WHPC
WOMEN IN HPC

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INTRODUCTION



The 2024 Move the Needle project, founded by Alces Flight, aimed to foster a positive and inclusive culture in High-Performance Computing (HPC) by promoting equality, diversity, inclusivity, accessibility (EDIA), and sustainability in the field.

To strengthen this effort, we partnered with Women in HPC (WHPC), an organisation dedicated to increasing the participation of women and underrepresented groups in supercomputing. WHPC's network of volunteers played a critical role in bringing this project to life.

This Goals & Facilitation Guide is one of the outputs that occurred thanks to Move the Needle. We are grateful to Alces Flight, WHPC, and the HPC community at-large for making this project such a great success.

Now, on with some goal setting and achievement getting!

INTRODUCTION



The Move the Needle project is about identifying goal(s) focused primarily in EDIA and setting you and your team on the path to achievement. Not sure where to start? The following pages host potential actions you can take over the next 3, 6 or 12 months, designed to be flexible and adaptable to your needs. While some ideas may appear repetitive, we recognise that goals can have different meanings depending on the individual or team pursuing them.

When selecting and managing your goal, ask yourself: Are you maintaining the status quo or reframing your approach? These goals are a pledge meant to push you out of your comfort zone, as far as you're ready to go. Avoid falling into "all or nothing" thinking—if you're stuck, try viewing your goal from a new angle to find momentum.

Thanks to our incredible community contributors, we have additional resources that you can use to help spark your ideas and guide your efforts. Use the following ideas as a starting point to shape your goals, and check out the additional resources at the end to help you refine and stay on track. Thank you for joining us on this journey!

Part One:

GOAL IDEAS



SKILLS-BASED GOALS



Why pursue skills-based goals?

Addressing the skills gap in the HPC industry is crucial to meet the rapidly evolving demands of this dynamic field. The gap stems from the need for professionals to enhance both technical expertise and soft skills, such as communication and collaboration, which are essential for success in diverse, multidisciplinary teams. Bridging this gap fosters stronger relationships, inclusivity, and a more productive work environment.

A significant challenge lies in the lack of thorough self-assessment and awareness of changing industry requirements. Many professionals fail to recognize the skills they need to develop or how these align with the demands of HPC. Acknowledging this gap and committing to improvement are vital steps toward professional growth.

Promoting a culture of continuous learning and proactive self-evaluation is key to closing the skills gap. This ensures individuals and teams remain adaptable and aligned with the HPC industry's rapid pace of innovation and collaboration, ultimately strengthening the field as a whole.



SKILLS-BASED GOALS

Personal Development / Soft Skills:

What does this mean? Personal development in the HPC industry involves continually improving skills and cultivating strong soft skills for better communication and collaboration. This enhances relationships and allows professionals to connect with diverse technical backgrounds, fostering a collaborative atmosphere in diverse teams. Some suggested goals include:

- Cultural Competence Training
- Active Listening Development
- Empathy Building/Awareness
- Networking Attendance in New or Related Field/Area
- Volunteer Work
- Educational Pursuit - Formal or Informal - On equity, diversity, inclusion or accessibility topic
- Conflict Resolution Training/Awareness
- Reflective Practices
- Decision Bias Training/Awareness
- Intersectionality Awareness/Understanding

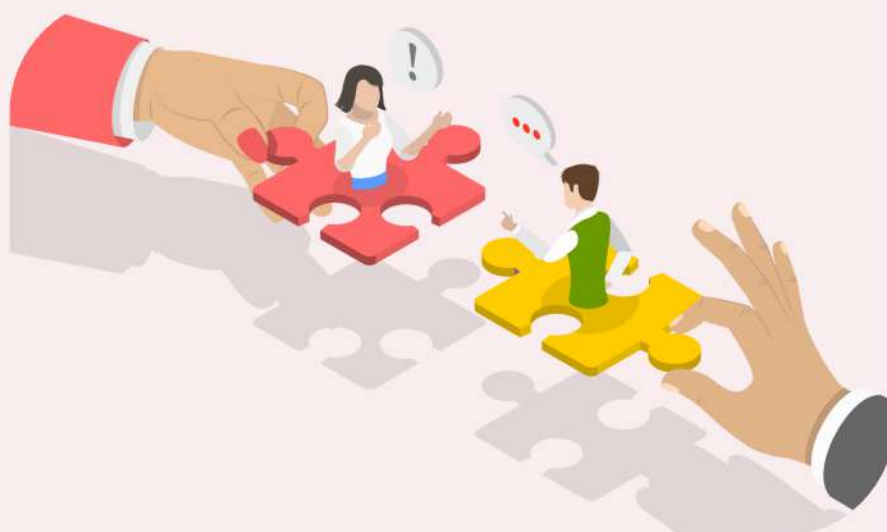


SKILLS-BASED GOALS

Skills / Skills Gap:

What does this mean? Addressing the skills gap in the HPC industry is an ongoing challenge, often emphasised in workshops and industry discussions. Closing this gap requires individuals and teams to be self-aware about skills that need improvement. A common issue is professionals not thoroughly assessing their skill sets or recognizing evolving demands in HPC. To tackle this, acknowledging the gap and fostering a proactive mindset for self-evaluation are crucial steps. Encouraging a culture of continuous development is essential for professionals to stay aligned with the dynamic requirements of the high-performance computing industry. Some suggested goals include:

- Personal Skills Analysis (ie. Current job v. Future Prospects)
- Team Skills Analysis
- Supply (My/My Team's) and Demand (Educational Opportunity) Analysis
- Internal Skill Survey / Assessment
- External (Moderate to Large-Scale) Skill Assessment
- External Research on Skills / Skills Gap - Literature/Study Review
- Cross-Department or Institutional Collaboration on Skills / Skills Gap
- Job Market Analysis
- Report Compilation and Review on Skills / Skills Gap



STAFFING GOALS



Why pursue staffing goals?

Addressing staffing goals in the HPC industry requires a commitment to equity and inclusivity. By broadening opportunities for candidates across gender, ethnicity, and background, organizations can tap into a diverse talent pool. This not only drives innovation but also fosters a workplace that values varied perspectives and experiences.

Retention in HPC demands more than conventional strategies; it calls for a holistic approach. Setting clear goals and understanding the unique needs of a diverse workforce are essential to improving employee satisfaction. This proactive effort contributes to higher retention rates and a stronger, more resilient team.



STAFFING GOALS



Recruitment (For any size hire):

What does this mean? Recruiting in the HPC industry requires an equitable approach. When seeking out better practices the aim is to broaden opportunities for candidates regardless of gender, ethnicity, or background. When approached correctly the result will not only enhance innovation by tapping into a diverse talent pool but also create a workplace that values varied perspectives and experiences. Some suggested goals include:

- Inclusive Language Review on Job Listing(s)
- Blind Recruitment
- Diverse Recruitment Panel Building
- Inclusive Interview Training
- Application Accessibility Review
- Review/Improve/Implementation of Flexible Working
- Review/Implementation of Code of Conduct (and/or Diversity and Inclusion Statement)
- Build and/or Review Recruitment Feedback Loop



STAFFING GOALS



Staff Retention (For all size teams):

What does this mean? Retaining staff in HPC necessitates a holistic approach that goes beyond traditional strategies. Establishing clear goals and developing a broader understanding of diverse workforce needs can enhance employee satisfaction and contribute to high retention rates. Some suggested goals include:

- Career Path Review and Development
- Pay Scale Review
- Recognition / Rewards Development and Consistency Plan
- Personal and Professional Development Planning
- Wellness / Burnout Exploration and Development
- Flexible Working / Job Share Review, Exploration and Development
- Work Relationships / Work Culture Review
- Review Communication Techniques and Delivery - Formal and Informal



ENGAGEMENT GOALS



Why pursue engagement goals?

Engagement goals, such as mentorship, sponsorship, and advocacy, are vital to career development and often overlooked. Understanding how to effectively participate in these areas opens up significant opportunities for growth and collaboration. These goals are accessible and scalable, making them an excellent starting point for individuals seeking meaningful ways to contribute and develop professionally.

Partnerships and coaching further enhance engagement by providing valuable outside perspectives. Through collaboration, partnerships bring diverse insights to address shared challenges, fostering a more profound understanding of complex issues. Similarly, coaching creates a space to exchange ideas and experiences, collectively deepening knowledge and strengthening connections.

By pursuing engagement goals, professionals can cultivate stronger networks, develop a broader perspective, and contribute to a culture of shared growth and learning.



ENGAGEMENT GOALS



Mentorship/Sponsorship/Advocacy:

What does this mean? Mentorship, sponsorship, and advocacy are crucial components of career development. Understanding what each means and how to engage is an important career aspect that many people overlook. Engaging in this area can be varied, however, it is easy to start with and engage if you are looking for a goal that can scale. Some suggested goals include:

- Educate on the differences between mentorship, sponsorship and advocacy
- Engage directly formal mentorship schemes (online, in-person)
- Attend networking events in related or cross-related fields
- Actively seek advice from respected team members, and/or leaders
- Pursue 'reverse mentoring'
- Pursue sponsorship of team members / colleagues / community members
- Actively participate in a group promoting diversity, equity, inclusion and accessibility



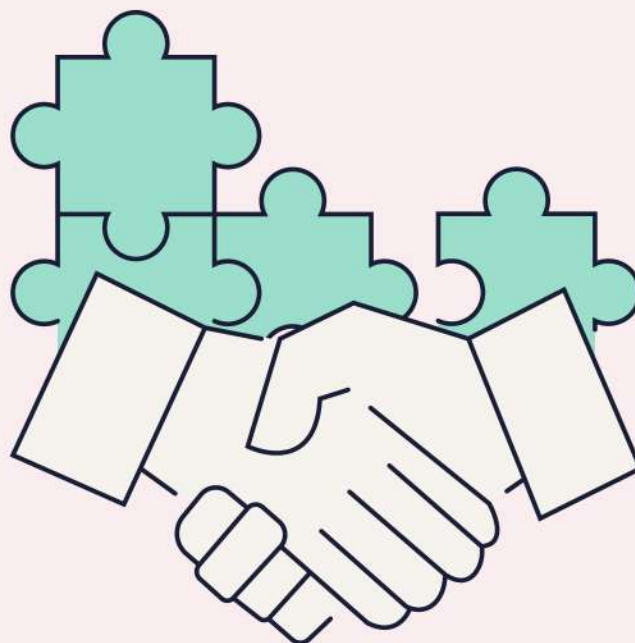
ENGAGEMENT GOALS



Partnerships/Coaching:

What does this mean? Partnerships and coaching offer valuable outsider perspectives and enhance understanding. In partnerships, collaboration brings diverse insights to tackle shared challenges, fostering a richer understanding. Both partnerships and coaching provide forums for exchanging ideas and experiences, collectively deepening understanding of common topics. Some suggested goals include:

- Personal or group goal setting
- Professional coach or group coach engagement
- External skills assessment (hard and/or soft skills)
- Accountability with direct coach or through groups / meetings
- Work/Life balance
- Career planning / advancement / legacy
- Navigating transitions (ie. moving from academia to industry or vice versa)



LONG-TERM GOALS

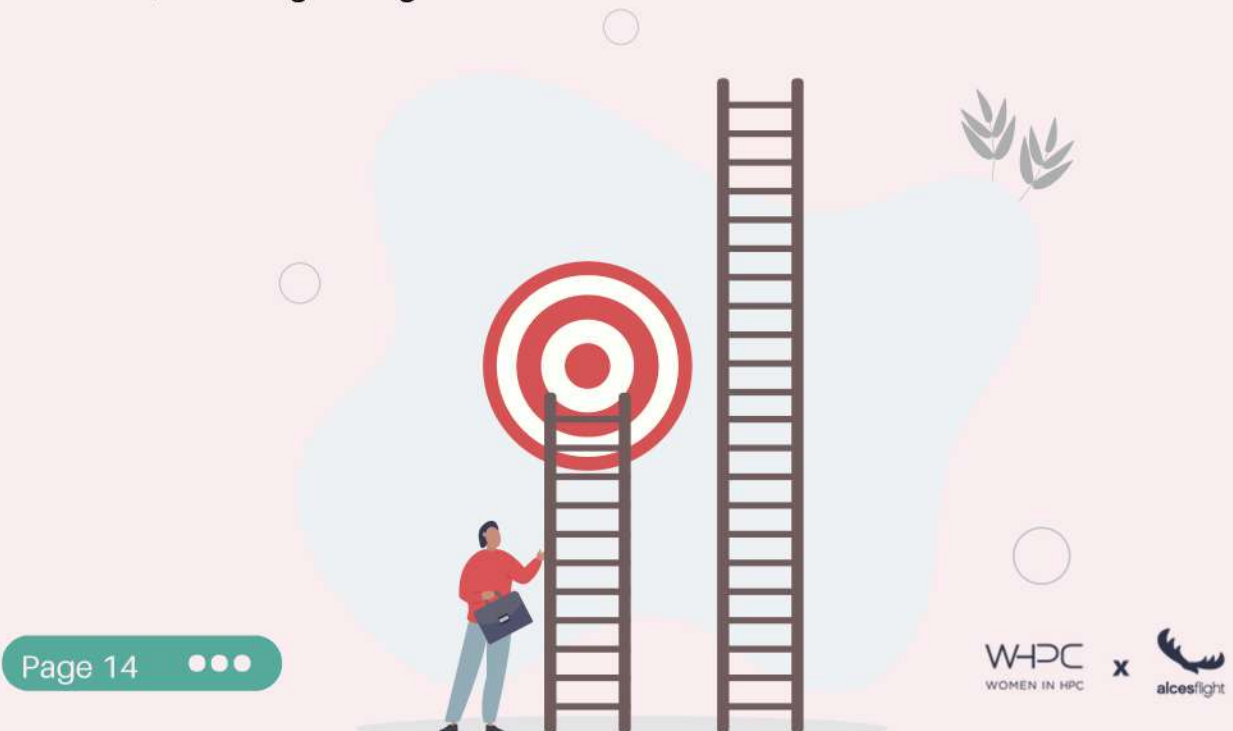


Why pursue long-term goals?

In the HPC industry, long-term goals are essential for ensuring sustainability and business continuity. As organizations adopt strategies to reduce environmental impact, leverage renewable energy, and uphold ethical operations, the focus naturally shifts toward creating long-term plans—particularly in workforce development. These plans are critical for sustaining a skilled talent pool, maintaining expertise, and driving continuous innovation.

Active engagement through workshops, forums, and collaborative projects plays a key role in achieving these goals. By encouraging individuals to share their expertise and insights, organisations foster a culture of collective knowledge and problem-solving.

Support systems further enhance this effort by helping participants navigate challenges and fostering a sense of community. This inclusive approach creates a dynamic environment where connections thrive, innovation flourishes, and long-term goals become achievable realities.



LONG-TERM GOALS



Sustainability/Business Continuity:

What does this mean? Sustainability and business continuity are crucial in HPC. Businesses are increasingly looking to adopt strategies in areas such as renewable energy, reducing environmental impact, and ensuring ethical operations. With this change there is a natural desire to focus on developing a long-term hiring plan. This is essential for sustaining a skilled workforce, ensuring expertise continuity, and fostering innovation. Some suggested goals include:

- Software development and optimisation
- Energy efficiency/long-term system use
- Renewable energy exploration
- Design/Architecture best practices
- Data efficiency
- Long-term hiring plan



LONG-TERM GOALS



Program Building / Engagement / Support:

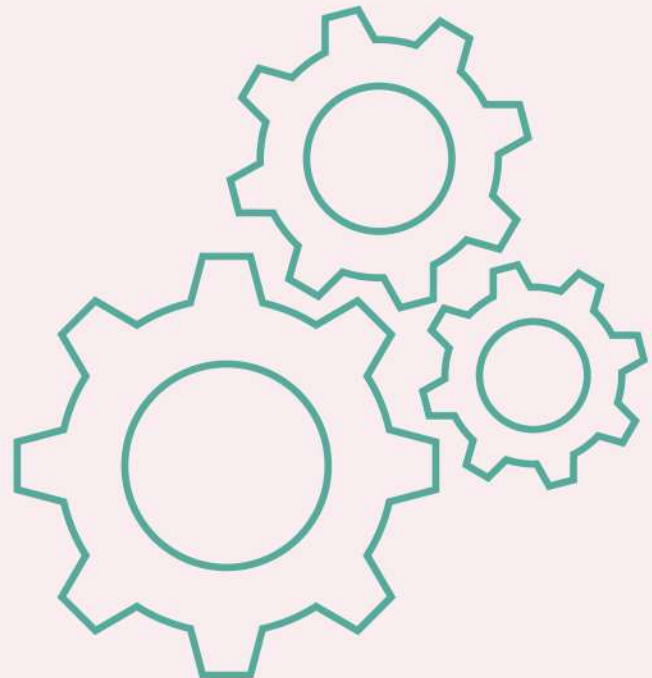
What does this mean? Active engagement, through workshops, forums, and collaborative projects, encourages individuals to contribute expertise and insights. Enhancing the experience through support systems helps participants navigate challenges and fosters a sense of community. This approach promotes inclusivity and a dynamic environment, facilitating connections and collective knowledge sharing. Some suggested goals include:

- Build or engage in an employee resource group (ERG)
- Build, contribute to or participate in a mentorship program
- Build, contribute to or participate in networking event(s)
- Contribute to or participate in a training workshop (hard or soft skill)
- Contribute to or participate in a group actively working towards any EDIA initiative (equity, diversity, inclusion, accessibility)
- Contribute or sponsor an individual who is new/transitioning to the HPC community (ie. mentorship, financial support to attend events)
- Build or contribute to an alumnae program
- Build or contribute to challenges (ie. student cluster) or events for students/young people interested in HPC



Part Two:

FACILIATING GOALS



YOUR GOALS



Now it's your opportunity to write up 1 to 3 goals you would like to achieve! To help you refine your goals we've placed some questions on the next page that can assist you on your journey.

Goal 1

Three horizontal dashed lines for writing Goal 1.

Goal 2

Three horizontal dashed lines for writing Goal 2.





Goal 3

Three horizontal dashed lines for writing Goal 3.



REFINEMENT QUESTIONS

Here are some questions to help ensure your goals are well-defined and have the best chance of success! While not every question may apply to your current goals, take a moment to review them—they might become relevant as you progress and explore deeper aspects of your journey.

-  **What's your motivation?**
Are you pursuing this goal because you genuinely want to, or because you feel obligated to? Understanding your motivation can clarify your commitment.
-  **Are your goals clear?**
Can you clearly define your goals? Are they measurable, and can they be adapted to meet your needs or those of your team if circumstances change?
-  **Is leadership on board?**
Do you need sponsorship or leadership involved to achieve your goal? If so, your goal is far more likely to be achieved when leaders are aligned and engaged.
-  **Is everyone represented?**
Have you included the right people in your initial goal design? Many initiatives fail because key perspectives are missing, so ensure diverse voices are at the table.



S.C.A.L.I.N.G.



CHEAT SHEET FOR CHANGE!

In addition to refinement questions, we've developed a cheat sheet to help others kick-start their own Move the Needle journey. You'll notice that the first two letters of our acronym focus inward—this reflects a key lesson from our team: meaningful change often begins with taking stock of what already exists. This approach helps establish goals and metrics that align with your organisation or group, creating a more positive and effective path forward.



Size of organisation (= **Speed** of change!)



Culture of your institution, department, group



Ally Engagement



Leadership Buy In



Investment (Time/Money or Both?)



Needs and Motivation



Goals and Accountability

ACCOUNTING + INVESTMENT



Setting goals is just the first step—ownership and a clear mechanism for reporting and support are what truly drive success. To stay on track, it's essential to create a system of accountability that works for you. Here are some strategies to consider:

Accountability Structures

- Accountability Group: Build your own "A-Team" of peers or mentors to support and challenge you.
- Timed Check-ins: Schedule regular progress reviews to reflect and adjust as needed.
- Reports and Metrics: Track progress with data submissions and tangible reports to measure success effectively.

Investing in Success

Dedicating time and resources toward your goals significantly improves the likelihood of achieving them. Consider the following:

- Time Commitment: Allocate a specific percentage of hours to focus on your goal.
- Resource Allocation: Ensure necessary tools, funding, or personnel are directed toward achieving the objective.
- Formal Support: Seek formal sign-offs or agreements to cement your commitment.

Defining Outcomes

Establish clear deliverables and deadlines for accountability:

- Agreed Reports: Define what outcomes will look like and document expectations.
- Deadlines: Set target dates for achieving milestones to keep momentum.

By creating an accountability framework and investing in your goals, you'll build the foundation needed to sustain focus and drive meaningful results. Find the approach that resonates best with you and your journey!

ADDITIONAL RESOURCES



Thank you for using the Move the Needle Goals & Facilitation Guide. Our project, which ran throughout the 2024 calendar year, has produced a variety of valuable resources designed to help you achieve your aims.

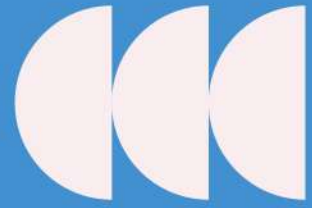
For more information and tools, please visit: www.alces-flight.com/move-the-needle

On this site, you'll find:

- Our approach to structuring accountability
- A comprehensive community Knowledge Portal
- Reports, including our halfway and final report
- Our project plan and dates, which you can adapt to fit your own journey

We hope these resources support you as you continue on your path toward success!

THANK YOU



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